KubeCon CloudNativeCon
North America 2026

Ground Control to Major Tom: We Need your Public Cloud in our Private Cloud



Astronauts



Mike Wilson

Staff Infrastructure Architect
Adobe Compute Engineering

- From genealogical data to shared hosting to OpenStack
- Currently focused on the Adobe Private Cloud



Andrew Block

Distinguished Architect
Red Hat

- Guiding organizations to embrace secure and scalable architectures.
- Open Source advocate and maintainer

What We're Here to Tell You

- Adobe’s heritage in the public cloud
- Bringing that goodness to the private cloud
- The hard part…
- Our successes and lessons learned



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About Adobe



CNCF Top End User Award

KubeCon + CloudNativeCon North America 2024

UPSTREAM IN THE CNCF

5,000+
CNCF contributions

46
CNCF projects

70+
Adobe contributors

Since 2015
upstream, starting with etcd

COMPANY

$23.8B
FY25 revenue

31,000+
employees

1982
founded, San Jose

Source: CNCF, Nov 2024; Adobe FY2025 Form 10-K

Adobe in the Public Cloud



99%

Percentage of product offerings running on Public Cloud platforms

*99% of statistics are made up on the spot

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Ethos

What is Ethos?

- Adobe's multi-cloud deployment surface
- Battle hardened, security compliant, and enterprise integrated
- Supports deploying Kubernetes clusters to the Major Hyperscalers (AWS/Azure) using their managed services along with Red Hat's ROSA and ARO flavors
- 10+ years of heritage and wide adoption across Adobe

EKS ROSA ARO AKS

Multiple providers. One familiar operating experience.

Ethos by the Numbers

500+

Kubernetes clusters across AWS, Azure & Adobe data centers

1M+

CPUs, plus thousands of GPUs, powering AI products

90%+

of Adobe's container compute runs on Kubernetes

Adobe in the Private Cloud

400K+
physical cores

~6 PB
of memory

4,500+
ESXi hosts across datacenters worldwide

Ongoing work

- Hardware refresh, large automation efforts, and evaluation of future technologies

Track record: *multiple nines of uptime — no customer complaints, no major incidents*

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An Inflection Point

Trigger:

After Broadcom acquired VMware, Adobe's infrastructure strategy and VMware's product direction diverged.

A Strategic Shift:

- Selected OpenShift and OpenShift Virtualization as a hosting and runtime platform
- The team running the VMware platform was chosen to build and run its replacement with help from an OpenStack native architect
- The mandate is to exit Broadcom completely by 2028



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The Gap

The Team: Talented VMware Admins

- Strong VMware, virtualization, Linux, and Windows skills
- Some scripting
- Ran a rock solid platform

New Territory

- Kubernetes and OpenShift
- Git and GitOps
- Cloud-native tooling and programming

First instinct: *reproduce VMware's ClickOps workflows and feature parity*

Fundamental Technologies



Kubernetes



Argo CD



CLOUD NATIVE
COMPUTING FOUNDATION



Open Cluster Management



KubeVirt

CNCF Projects were crucial to the future state design and architecture

Putting a Plan Together

Partnerships Across Adobe

- Storage, networking, platform, and identity teams delivered through operators and GitOps
- Redesigned networking for portability, workload mobility, acquisitions, and multitenancy
- Absorbed as much as we could from heritage Ethos

GitOps as a Shared Operating Model

- Learned through deployments: one manual cluster, then its configuration in Git
- Grew from a single-cluster repo to a fleet monorepo, then a modular structure
- Built momentum through daily pull requests and peer reviews



Organizational alignment became crucial for developing a go forward plan

Decision Making

Architecturally Significant Requirement (ASR) and Architecture Decision Record (ADR) have become integral to defining technical strategy and implementation

- Transitioned from a wiki based process to git
- Structurally defined with YAML front matter
- Encourages collaboration through each step of the decision making process



The options are plentiful. Strategic choices needed to be made to when establishing and running a new platform

One decision, revised in the open

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Governance in practice: how a cluster naming ADR evolved as the platform grew

ADR-0001 · Jan 2026

OpenShift cluster naming convention

```
status: Superseded
superseded-by: 0003
```

ace-ocp-slc-001

ADR-0003 · Aug 2026

Cluster identifier and base domain

```
status: Accepted
supersedes: 0001
```

logos1-prod-or1

Why it changed

Logos arrived
The platform got a brand; names should carry it

The fleet grew
A handful of clusters became a global fleet

Ops clarity
Prod must be obvious at a glance during an incident

What didn't change: *a cluster name is an address, not a manifest.*

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AI Adoption

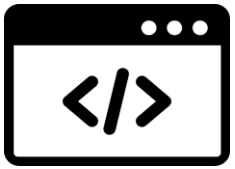
AI capabilities have been introduced incrementally

Architectural Governance



ASR and ADR's are designed for both Humans and Agents

Source Code Management



Assists with source code generation and reviews

Agents assist; humans approve everything implemented or deployed (For Now)

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Enter Logos: Establishing a Brand

A Private Cloud Partner for Ethos

- Technology, processes, and team responsibilities packaged into a consumable private cloud offering
- Built on Ethos's GitOps and operations approaches: copied, forked, or adapted
- An identity people could trust, next to a platform already familiar across Adobe



Purpose: *offer private cloud where it adds value within Adobe's broader cloud strategy*

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Where We Are Today

20+
development clusters for platform feature validation

1
production-scale validation cluster, tested and retired

4
full-scale production clusters built as the B side of A/B failover

A Plethora of Lessons Learned

- **Make handoffs explicit:** guardrails and shared discipline keep work moving across geographies.
- **Test for real needs:** define application-level performance targets before stress-testing the platform.
- **Build together, early:** iterate with application and partner teams; embed people who can bridge the layers.

Storage: *Joint collaboration resulted in new environment outperforming legacy environment!*

Looking Ahead

2027: from four production clusters to a global fleet

- Target: ~60 clusters across multiple geographies by year-end, serving production and failover traffic
- Begin migration effort: workloads that can't simply be redeployed

Ethos on Logos

Cluster API (CAPI) and Logos Controllers for Kubernetes (LCK) let Ethos teams deploy to Logos the way they deploy to public cloud

The payoff: public-cloud workflows on private-cloud infrastructure — with more control over cost, data, and where Adobe innovates.

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Questions?

Ground control to Major Tom… give me a reading on the altimeter.

Blogs & references coming soon

