Seamless Migrations.
Safe Upgrades.
No Downtime.

Migrating 10,000+ applications and upgrading 12,000 racks demanded careful execution. OpsWerks delivered — keeping production steady and delivery moving.

Client Background

A Fortune 100 tech giant, home to one of the world's largest developer ecosystems, faced mounting risk from aging infrastructure across its CI/CD platform and 17 data centers in 7 countries.

Modernization was urgent to cut technical debt, improve reliability, and reduce costs. But it hinged on a large-scale migration and major updates — each carrying risk. The transition required methodical execution to prevent user disruption, protect mission-critical services, and sustain developer productivity.

The Challenges

The modernization effort required two large-scale infrastructure transitions:

Platform Migration

Needed to migrate more than 10,000 applications off a legacy, Heroku-style CI/CD platform built on Mesos onto a modern GitHub → Jenkins → Docker → Kubernetes toolchain.

Many apps were dormant or poorly maintained, leaving the platform brittle, inconsistent, and costly to operate.

Instability had turned builds into bottlenecks, slowing developer productivity and release velocity.

Migration was the only path forward but carried risks: downtime, broken dependencies, and disruption for thousands of developers.

Hardware Upgrade

12,000 racks across 17 data centers in 7 countries required top-of-rack switch replacements.

Driven by a hard 9-month end-of-life (EOL) deadline and licensing constraints.

The challenge: orchestrate this massive hardware upgrade with precision — managing global logistics and coordination — while ensuring zero disruption to production traffic and service availability.

Ops Werks' Solution

Platform Migration

At the outset, OpsWerks led a comprehensive discovery and classification effort across 10,000+ applications.

✓ Safely decommissioned ~60% identified as dormant or low-value through automated reporting, spin-downs, and archiving.

✓ Immediately cut resource consumption and operational overhead while reclaiming infrastructure.

For the remaining 40% of the applications, OpsWerks provided white-glove migration support, combining precision planning, stakeholder coordination, and automation-driven execution.

To minimize friction and risk during the migration, the team:

✓ Built custom Dockerfiles to replicate legacy environments.

✓ Developed tailored build scripts and monitored cutovers for complex cases.

✓ Created runbooks and self-service guides to enable consistent migrations across major development languages.

✓ Automated backups so teams could retain critical database data beyond standard retention windows.

This blend of automation and hands-on expertise streamlined the platform, cut waste, and enabled a smooth transition to the modern CI/CD toolchain.

Hardware Upgrade

OpsWerks engineered a rack-by-rack execution strategy to modernize 12,000 racks across 17 data centers.

| 12,000	17	0
Racks Modernized	Data Centers	Service Impact

To safeguard the process and maintain efficiency, the team:

- Developed a custom Python health validation framework for pre- and post-upgrade checks

- Built real-time dashboards to track upgrade status and completion

- Automated Slack alerts and scheduled cutovers aligned with production freeze windows

These measures ensured 12,000 racks were upgraded on schedule with no service disruption — modernizing the network backbone while maintaining business continuity.
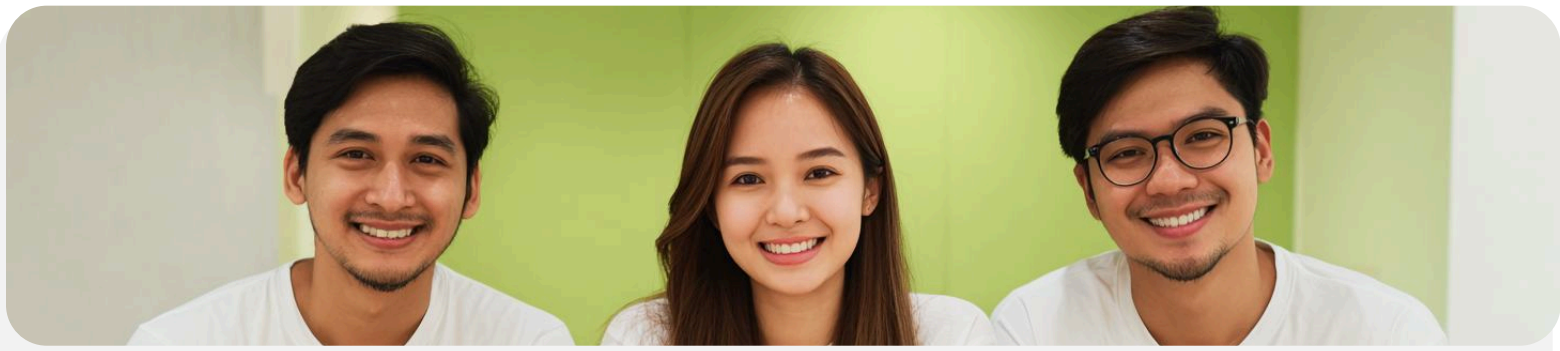
Scope of Work

- **Application migration:** Audited 10,000+ applications, decommissioned 60%, and migrated 40% to a modern GitHub → Jenkins → Docker → Kubernetes delivery platform.

- **Data center upgrade:** Engineered automation and orchestration frameworks that enabled safe rack-by-rack top-of-rack switch replacements across 12,000 racks in 17 global data centers.

- **Global coordination:** Managed logistics and cutovers across 7 countries, aligned with production freeze windows.

- **Timeline:** Delivered both modernization initiatives under a hard 9-month end-of-life deadline — with zero downtime.

The Ops Werks Advantage

Embedded expertise: Small, specialized teams of automation engineers and platform specialists integrated directly with client stakeholders.

Automation everywhere: Custom Dockerfiles, build scripts, and a Python-based health validation framework ensured consistency and safety.

Clear visibility: Real-time dashboards tracked progress; automated Slack alerts kept teams aligned ahead of every change.

Outcome-first mindset: Every step measured against reliability, continuity, and zero impact to production

Results

20% faster build times and more reliable deployments.	**12,000 racks upgraded** in 17 data centers across 7 countries in 3 months.	**0 service outages** during migration and upgrades.
60% of apps retired reducing fragility and operating cost.	**Modernized global DevOps pipeline** increasing stability, velocity, and release cycles	**Created repeatable playbook** for large-scale migrations with zero impact.

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"I really want to thank you for digging me and the rest of us out of this particular hole. It was very appreciated. I'm very happy with you guys."

– Engineering Systems SRE

Facing Similar Challenges?

Contact our Partner Success Team at partnerwithus@opswerks.com to see how we can help.

About OpsWerks

✓ OpsWerks is a trusted partner to the world's most elite platform and infrastructure engineering teams, helping them operate at scale.

✓ We streamline hybrid cloud operations, execute complex migrations without downtime, and enable developers to quickly build and deploy global apps used by hundreds of millions.

✓ From managing CI/CD ecosystems and building orchestration tools to 24/7 support for business-critical systems, for over a decade we've kept developers focused on building.