



“Harness is one of the premier tools available for handling Kubernetes-based deployments.”

NUTANIX

“Now, we are able to spend less time worrying about deployment issues and more time focusing on product features.”

Harjot Gill, General Manager, Epoch, Nutanix

Nutanix Democratizes Continuous Delivery With Harness

About

- Harjot Gill, General Manager, Epoch, Nutanix
- Kevin Lu, Member of Technical Staff, Nutanix
- Nutanix is a global leader in cloud software and hyperconverged infrastructure solutions, making infrastructure invisible so that IT can focus on the applications and services that power their business

Compelling Event

- Migrating Nutanix Epoch web services to Kubernetes running on GCP

“Incorporating Harness into our release pipeline has increased developer productivity.”

CI/CD Challenges

- Teams deploying bi-weekly to production clusters
- Time-to-production (dev to prod) could take weeks
- Lack of standardized deployment pipelines across development, QA and operations teams
- Developers would manually deploy to Kubernetes clusters using scripts and kubectl, this took ~15 mins per cluster
- Lack of deployment auditing across clusters
- Kubernetes clusters and configuration could get out-of-sync with different versions of microservices and builds
- Rolling deployments with revenue risk - no blue/green or canary deployments
- Ad-hoc key and config management meant pipeline deployments across environments could take 4 people from Dev, QA and Ops up to 4 hours
- Production deployment verifications were manual and could take up to 30 minutes
- Looked at open source solutions like Spinnaker but decided it would be too much to setup and host

Harness Benefits

- Self-service Continuous Delivery for Dev, QA and Ops
- Out-of-the-box integrations with Jenkins, GCP, Kubernetes and HashiCorp Terraform
- Consistent, repeatable software deployments across all Kubernetes clusters
- Auto-trigger pipelines based on developer commits
- Complete history and audit log of all deployments
- Pipeline templates so teams can reuse deployment logic
- Automated canary deployments based on Epoch metrics and machine learning
- Out-of-the-box secrets store to comprehensively manage secrets and keys

CI/CD Ecosystem

- Docker, Kubernetes, Google Cloud Platform
- Jenkins, CircleCI, Selenium, HashiCorp Terraform

Business Impact

- Harness improves developer productivity, as developers can spend less time deploying and more time building features
- Deployments are democratized through self-service
- Reduced time-to-production from weeks to days (promote builds from dev to production clusters)
- Epoch teams can now deploy independently on their own instead of requiring 4 people taking several hours
- 93% reduction in deployment time from 15 mins per environment cluster to 60 seconds
- Avoided 6-months and \$267,000 in development costs to build own bespoke CD platform
- Release engineers, who may have had to spend lots of time to help developers deploy, can focus their efforts on strategy