



KubeCon



CloudNativeCon

North America 2024





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HARBOR

Harbor

What We Have Accomplished

Vadim Bauer (8gears Container Registry)
Orlin Vasilev (SUSE)

Orlin Vasilev

Harbor Community Manager

CNCF Ambassador

Principal OSS Technology Advocate @SUSE



Vadim Bauer

Harbor Maintainer

Founder - 8gears Container Registry





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Harbor is a CNCF-graduated open-source container registry to store and manage container images and other OCI artifacts securely with policies, role-based access control, vulnerability analytics and signing.



- Access Control
 - RBAC, Project Isolation
- Artifact Distribution
 - Replication, Proxy Cache, P2P Preheat
- Security & Compliance
 - Vulnerability Scan, Artifact Signature, CVE Export, Security Hub
- Policy & Maintainability
 - Quota, Immutability, Retention, Garbage Collection, Log Rotation
- Extensibility
 - OIDC/LDAP Authentication, Webhook, Pluggable Scanner, Robot Account

1. Works for small Teams and Enterprises

- a. RBAC
- b. IDP and SSO - External identity provider for authentication and authorization

2. Makes CISOs happy

- a. All your images in one place – Replication, Proxying
- b. Vulnerability overview, audit trails

3. Ops people's darling

- a. Automation & IaC – RESTful API, Terraform, Pulumi, CLI
- b. Operational control mechanisms – GC, Quota, Policies



What's New in Harbor 2.12











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-     **Released November 8th, 2024**    
- Bandwidth Limit for Proxy-Cache Limits
- Improving SBOM Capabilities
- Audit Logging for Robot accounts
- Full access Robot Account
- Bug Fixes and Improvements



SBOM Demo



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 goharbor/harbor-operator

- For deploying and managing the Harbor service stack
- Uncertain Feature for the Harbor Operator
- Currently Outdated
- The Operator is looking for additional Maintainers
- Connect with us if you are using the Operator

 goharbor/harbor-cli

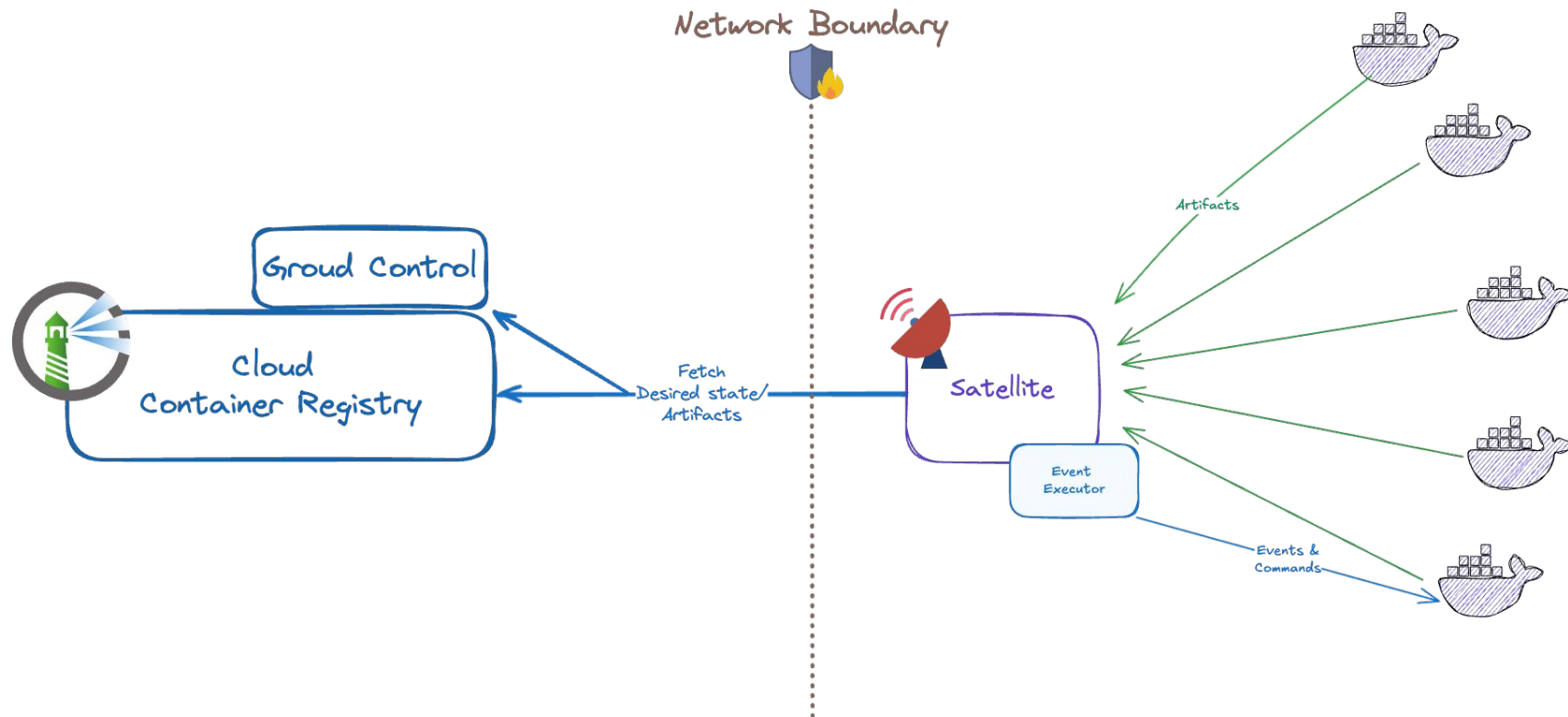
- Official Harbor CLI
- Interact with Harbor on your terminal and in your CI/CD
- For scripting and piping
- Soon available via your favorite Package Management System
- Build by LFX Mentorship program manatees

Harbor Satellite is a containerized artifact distribution and management solution for the edge, ensuring consistent, available, and integrity-checked artifacts in edge computing environments at scale


Bring container images closer to workloads

- Multiple sites and locations EDGE/IOT/K8s
- Environment without permanent connectivity
 - E.g. Remote Locations, Ships, Satellites, Firewalls
- High availability of artifacts close to workloads
- Highly isolated sites
 - Restricted ingress/egress data flow
- Global image distribution
 - Container Image CDN
- Immediate application updates across all sites

Harbor Satellite



Satellite acts as Gateway or Proxy for containerized software per site

- Software for site is orchestrated remotely with policies and rules
- Desired artifacts are synced to site to match desired state
- Satellite event system can initiate downstream actions e.g. deployments
- Designed to run on edge devices.(e.g. single process, unattended mode)
- Head over to [container-registry/harbor-satellite](#) (temp) 

- People are already using OCI and Harbor to store and distribute AI models
- OCI is “almost” perfect for AI in Cloud Native
 - Mount OCI Images as volumes (k8s 1.31)
 - Large size
 - Standardization
- The Harbor team with other organizations are working on making AI Model first class citizens for Cloud native environments

○ **Managing and Distributing AI Models Using OCI Standards and Harbor - Steven Zou & Steven Ren, VMware by Broadcom**

Click here to add to My Schedule.

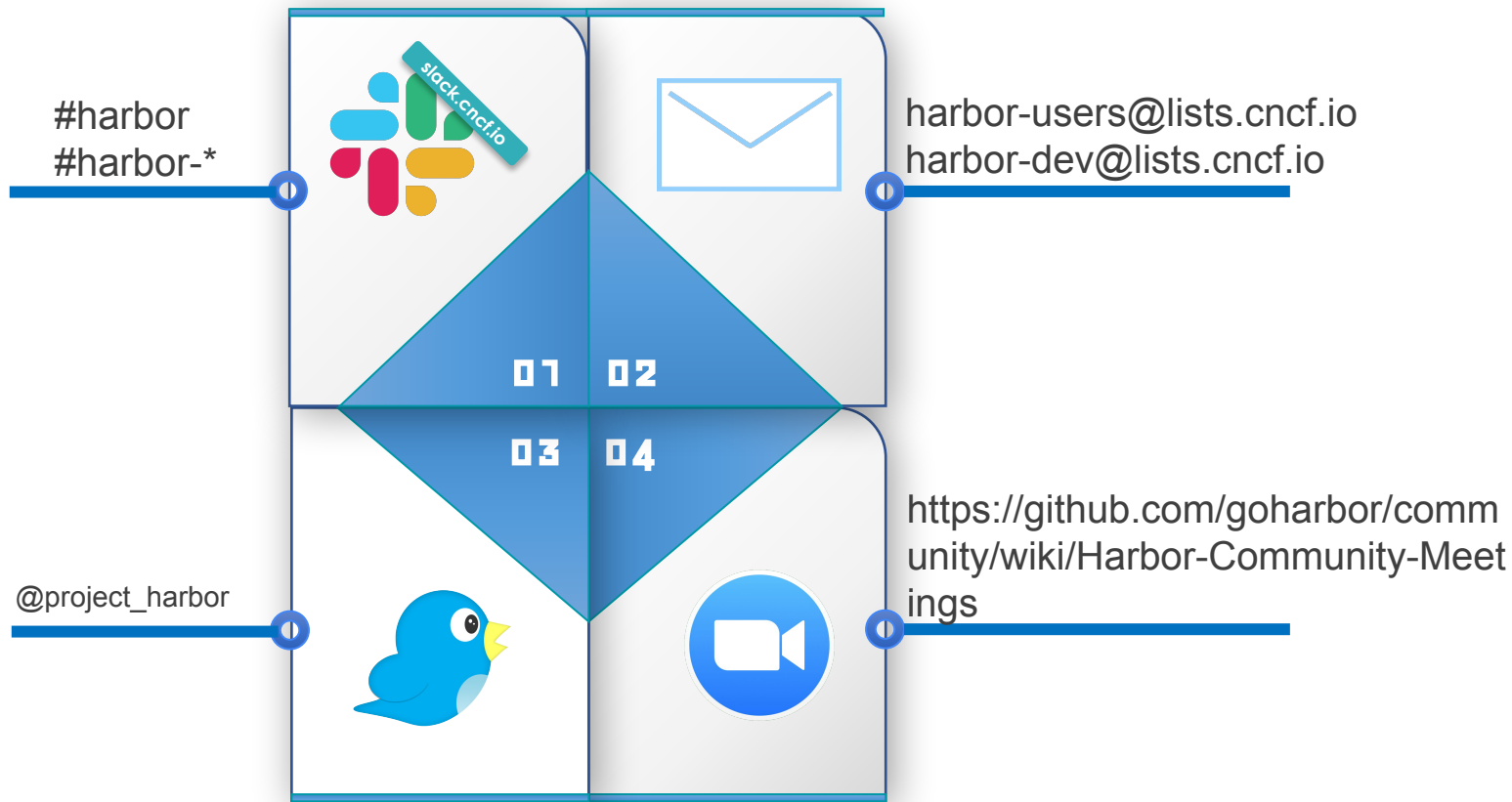
📅 Thursday November 14, 2024 5:25pm - 6:00pm MST

📍 Salt Palace | Level 2 | 255 E

- General Feature discussion -
<https://github.com/goharbor/harbor/discussions/21054>
- Improving Audit logs
 - More granularity
 - Performance
- AI Model Spec Collaboration

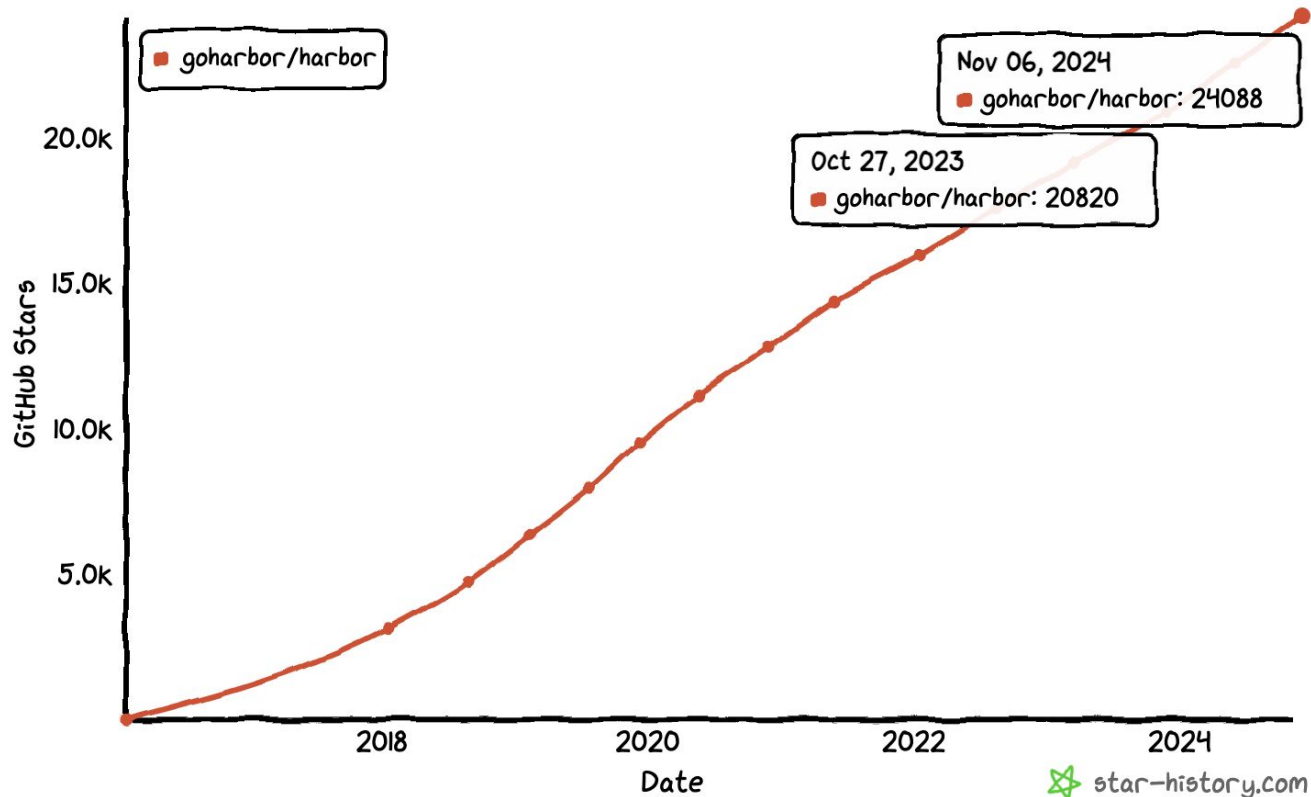


Features 2.13



9 years and counting

Star History



New org members



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UI/UX engineers - Angular/NodeJS

Project Management/Release Managers

Harbor Operator contributors/maintainers

Thank You and Reach Out

Ask questions, get help!

- Slack
- Mailing list
- Community Meetings

Chat with us at KubeCon:

- Maintainers track
- Project Pavilion

9A - PM shift



JOIN US