

Adopting CDEvents and Embracing Interoperability

Andrea Frittoli
Developer Advocate @ IBM
andrea.frittoli@uk.ibm.com
 @blackchip76 |  afrittoli

Session: sched.co/1aBN2



Andrea Frittoli

⌚ afrittoli | 💬 andreafrittoli | 🐦 @blackchip76

- › Open Source Advocate @ IBM
- › Lives in Wales, enjoys the wind
- › CDEvents maintainer, Events SIG co-chair
- › Chair of CDF Technical Oversight Committee Governing Board



Contents

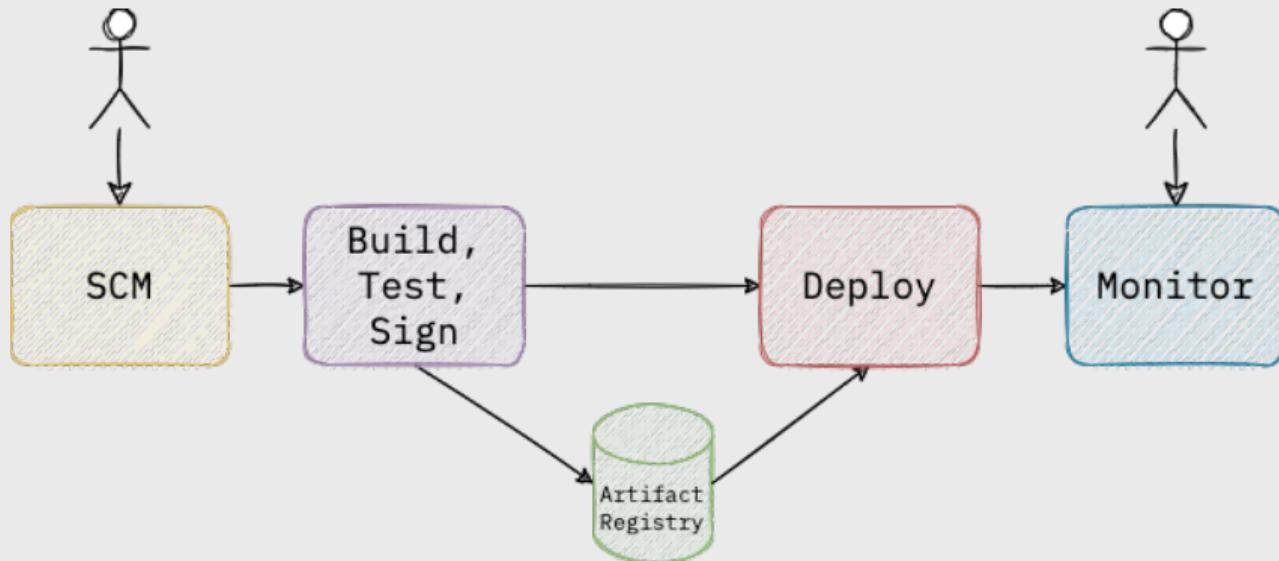


Software Factory
CDEvents
Tools Adoption
What's New
Roadmap
Thank You

Software Factory

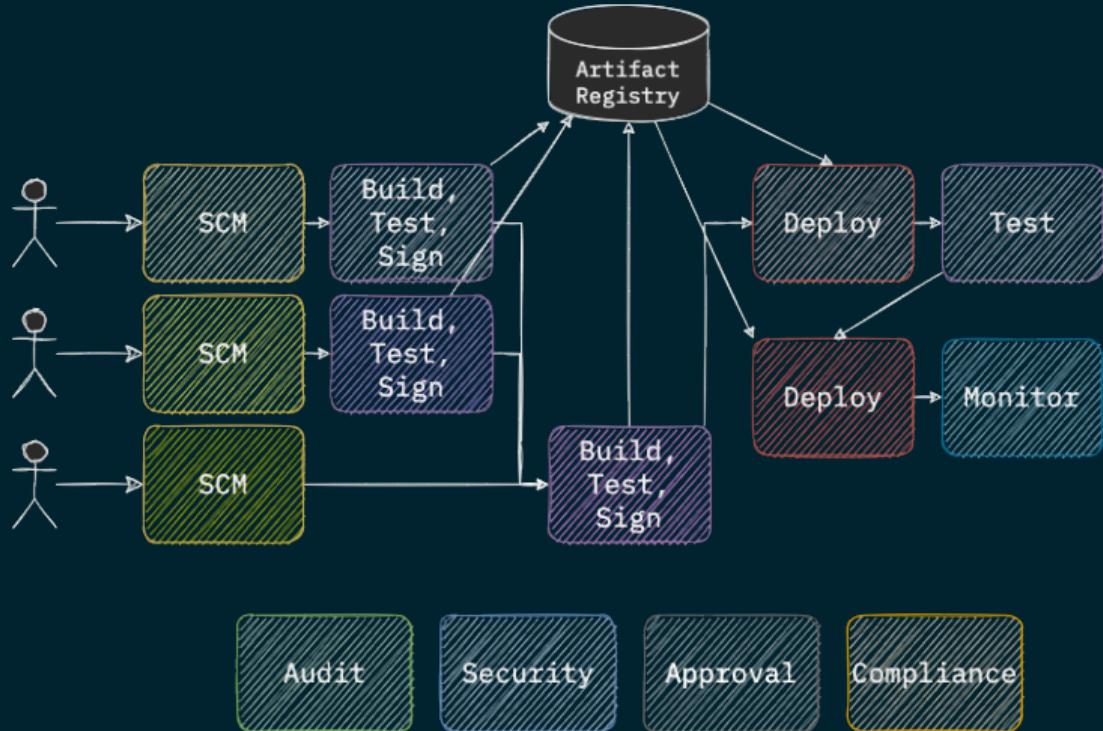


Software Factory

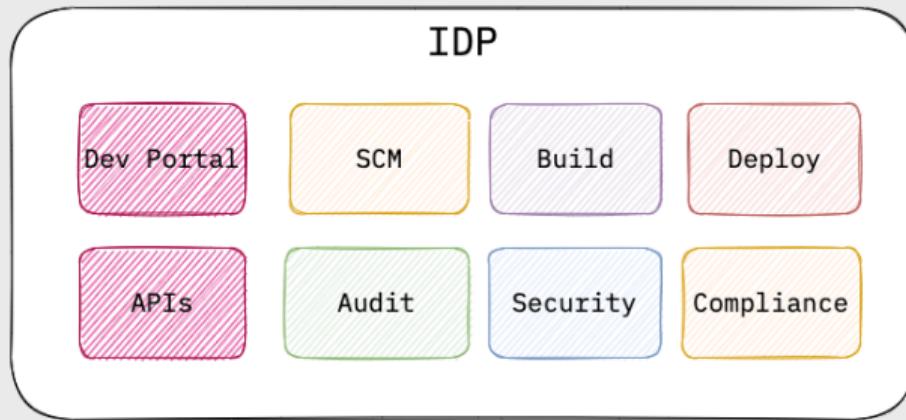


Software Factory

- › "Glue code" explosion
- › Does not scale
- › Expensive to onboard new services
- › Hard to maintain

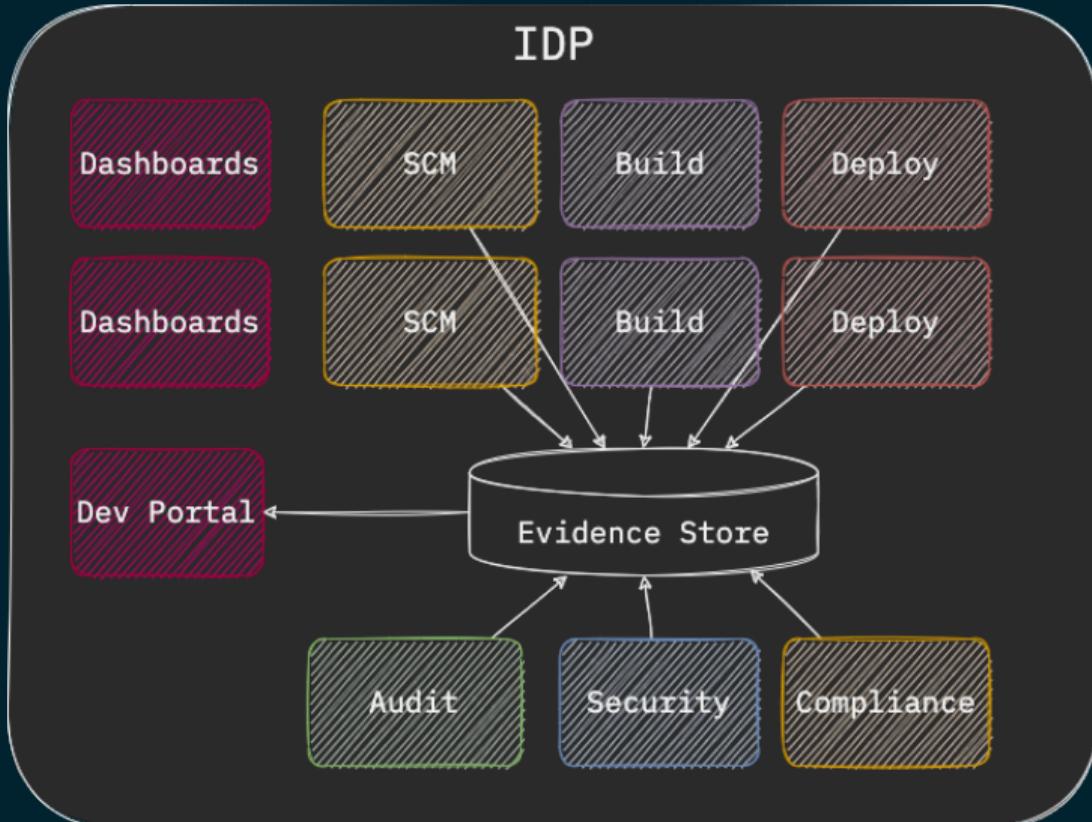


Internal Development Platform

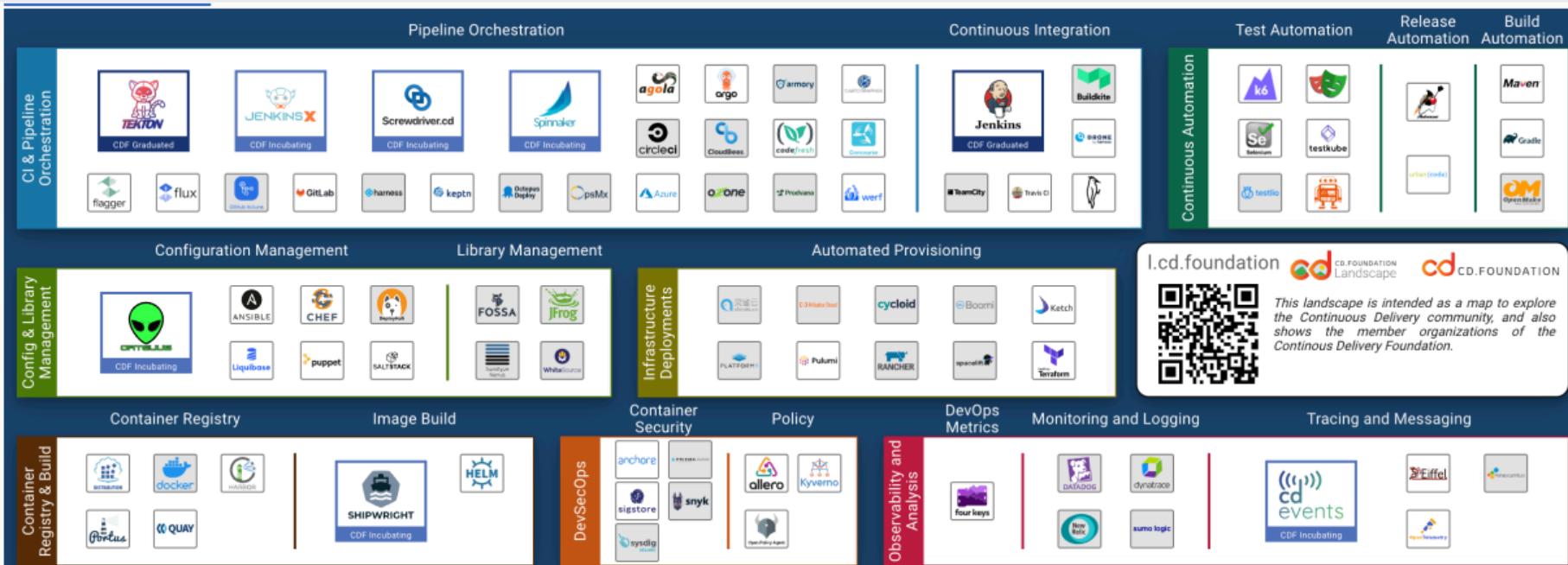


Internal Development Platform

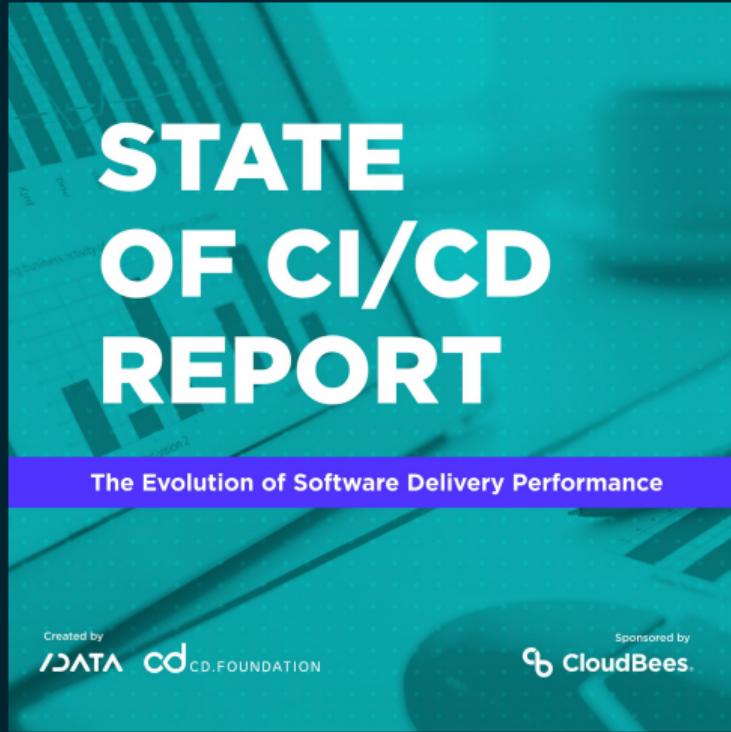
- › Lock-in effect
- › Missing/Broken Data
- › Many Dashboards



A Plethora of Tools



State of CI/CD Report 2024

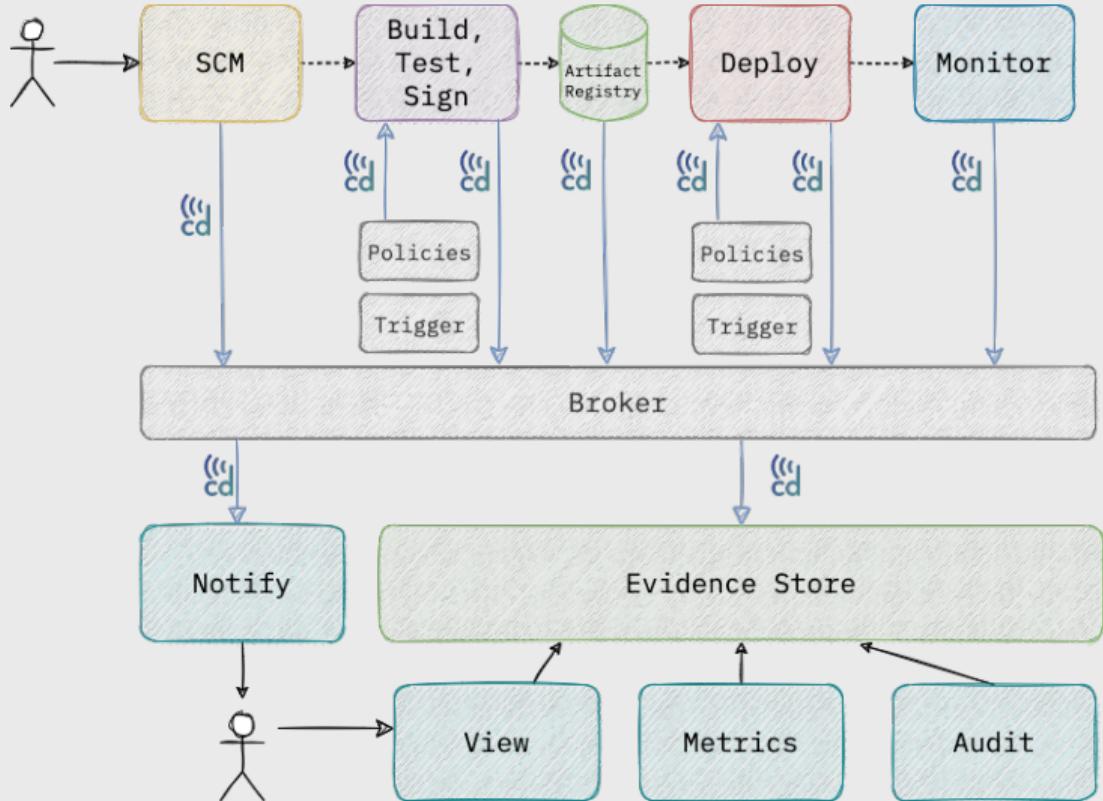




A common specification
for Continuous Delivery
Events

Interoperability

- › Less "Glue Code"
- › More focus on DevEx and DevOps metrics



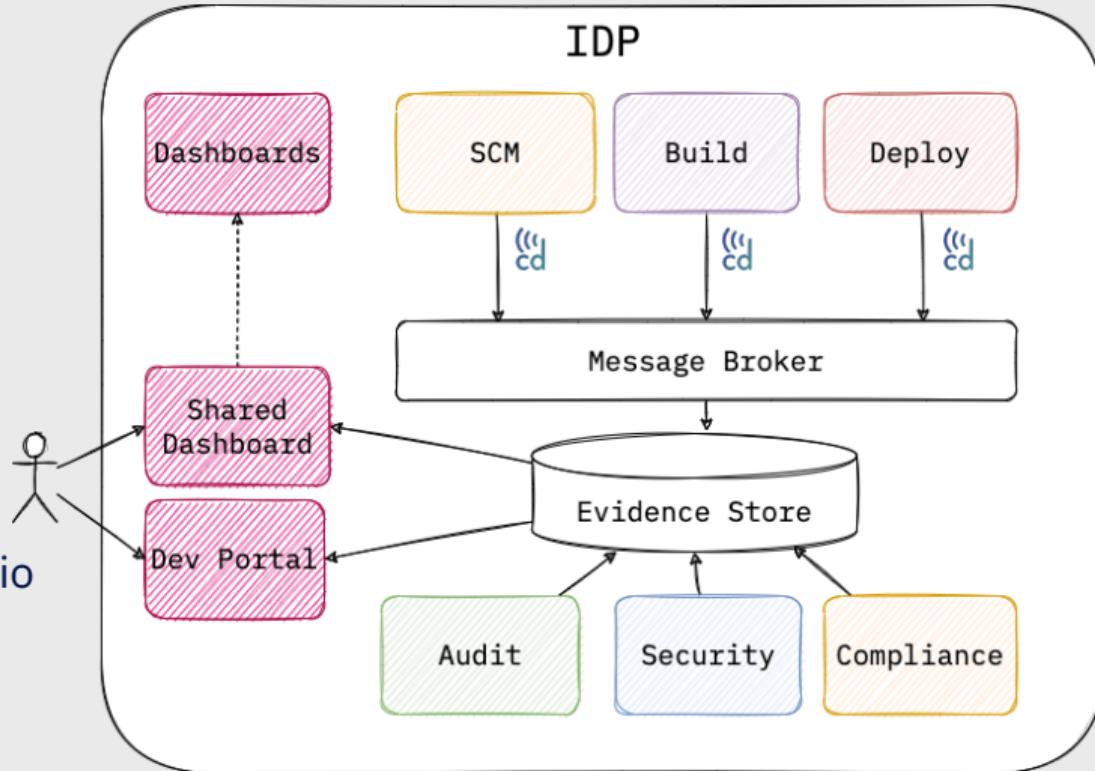
Evidence Store Supply Chain Security

- › Where is this code deployed?
Tracking vulnerabilities
- › How was this code built?
Audit and compliance
- › How long did it take?
DevOps Metrics
- › What's happening right now?
One overview dashboard for all needs



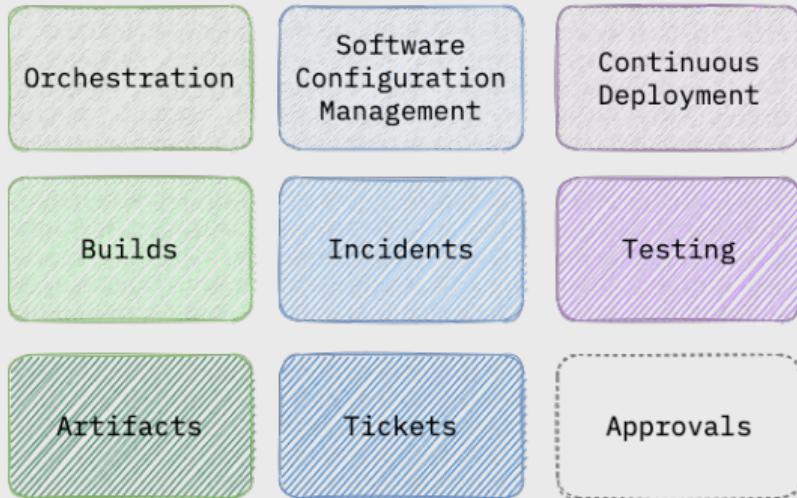
IDP and CDEvents

- › Add/swap tools
- › Consistent Data
- › Single Dashboard
- › Promotes Collaboration through Open Source
- › CDEvents and <https://cnoe.io>



Components

Specification:



Bindings:



SDKs:



Community

- DevOps Engineers
Share your Interoperability pain-points
- Tool Maintainer
Adopt CDEvents for your tool
- DevOps Vendor
Make it easier for users to integrate
your offering by supporting CDEvents
- Love DevOps & Interoperability
Join us and contribute to CDEvents!





Tools Adoption

Photo by Clay Banks, CC0



Overview

CDF Projects:

- Jenkins
- Spinnaker
- Tekton (Experimental)

CNCF Projects:

- Testkube
- Flux
- Argo CD (POC through Notifications)
- Harbour (POC)

Other Projects:

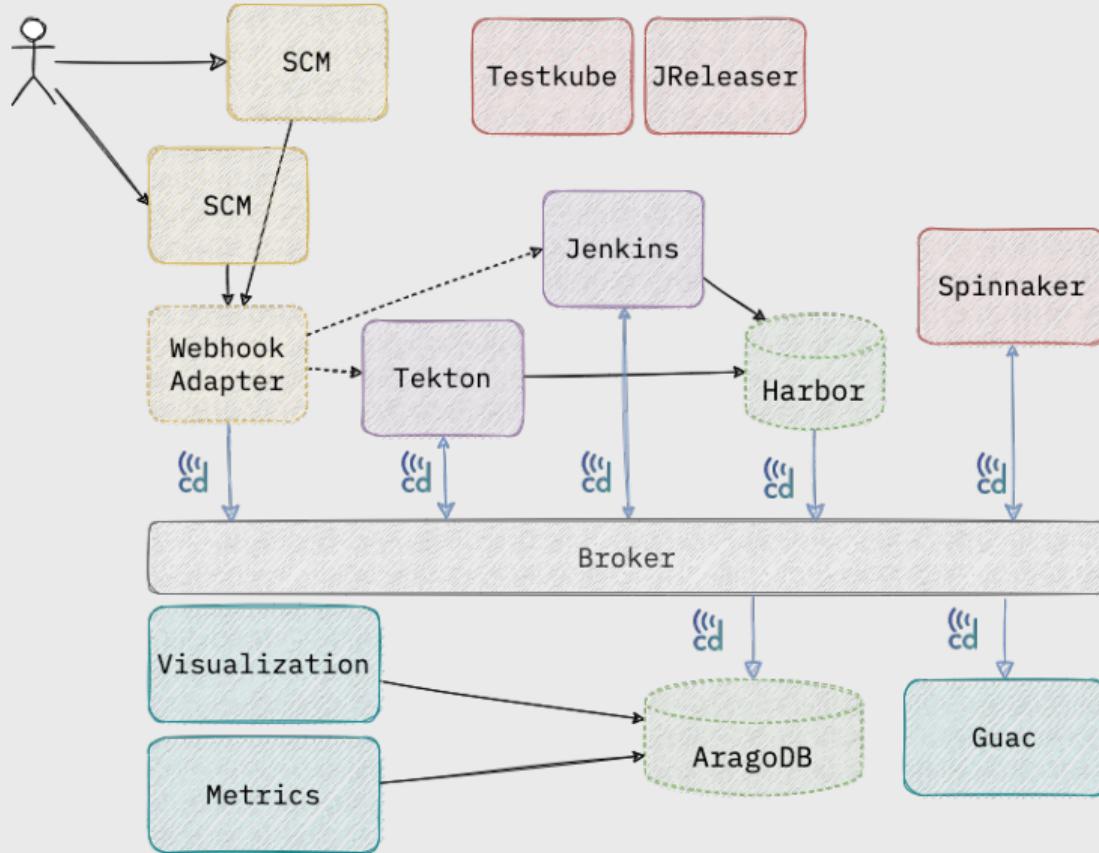
- JReleaser
- Guah.sh (OpenSSF)

Planning:

- Updatecli
- Ortelius
- Podtato-Head



All Together



Successes and challenges

Challenges:

- › Grow the Community
- › Widespread Adoption
- › Culture

Lessons Learnt:

- › Address specific pain point
- › Collaborations

Success:

- › Widespread Interest
- › Tools Adoption
- › End Users





Collaborations

- OpenTelemetry:
Semantics for Pipeline
Observability
- [https://cnoe.io:](https://cnoe.io)
Interoperability layer for IDP
- Value Stream Management
Interoperability (VSMI) TC



What's New



Photo by [Josh Sorenson](#), CCO



(((())) cdevents 0.4

Linked Events:

- › Connect Events
- › Fast Filtering
- › Visualization
- › Audit Trail

Ticket Events:

- › Inception to Deployment
- › E2E Metrics
- › Ticket Based Automation
- › Interop.

Custom Events:

- › Schema
- › Custom Types

Artifact Events:

- › SBOM, User
- › New Predicates

Release Announcement:



Roadmap



CDEvents Roadmap v0.5 and beyond

Supply Chain Security

- SBOM,
- Provenance
- Signed Events

New features

- Links,
- Workflow IDs
- Compositions
- Releases

Software & Architecture

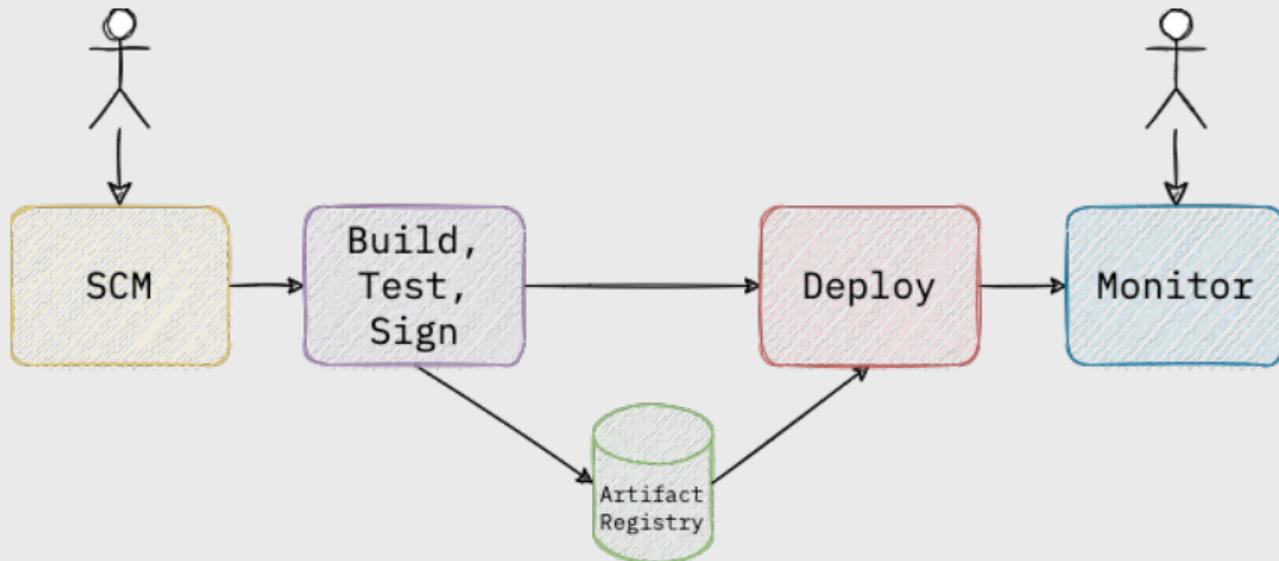
- SDKs (JS, Rust)
- Adapters
- Proof of concept
- Broker, Policy

Documentation:

- Reference Architecture
- Example events
- Example implementations



Conclusions



Thank You!



References

- › cdevents.dev, github.com/cdevents
- › github.com/cdevents/spec/blob/main/CDEvents_Whitepaper.pdf
- › github.com/jenkinsci/cdevents-plugin
- › github.com/spinnaker/governance/blob/master/rfc/cdevents-spinnaker.md
- › github.com/afrittoli/cdeventer
- › github.com/cncf/tag-app-delivery
- › VSMI TC @ www.oasis-open.org/committees

Andrea Frittoli | andrea.frittoli@uk.ibm.com

 @blackchip76 |  afrittoli |  andreafruttoli

