

Adopting CDEvents and Embracing Interoperability

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Session: sched.co/1aBN2



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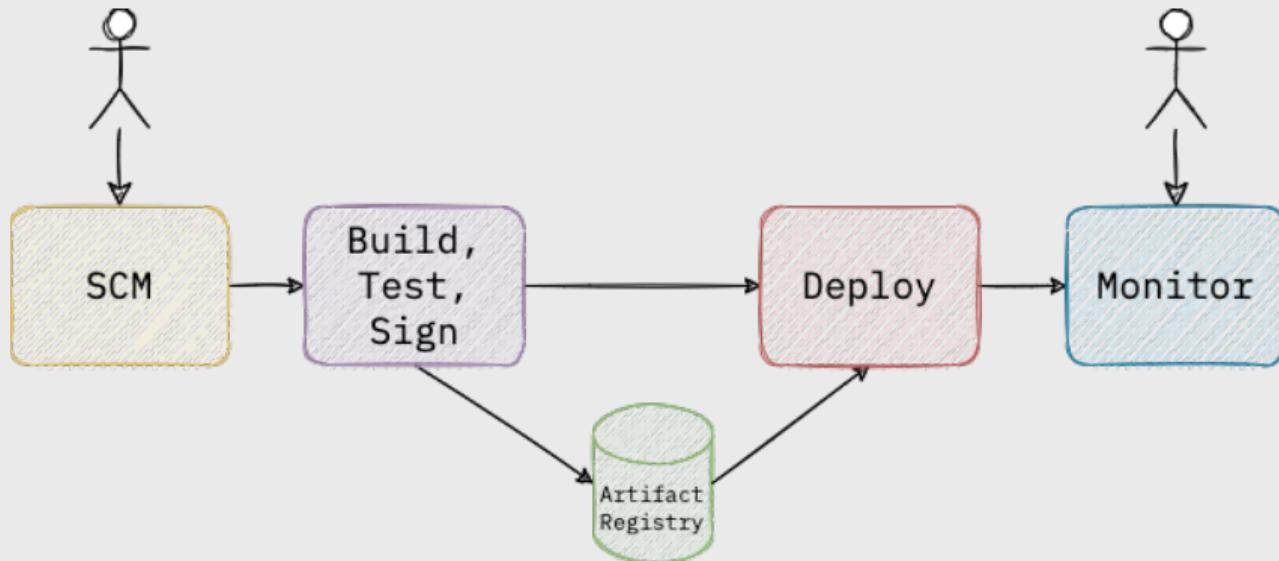
Software Factory



Photo by Jezael Mendoza, CC0

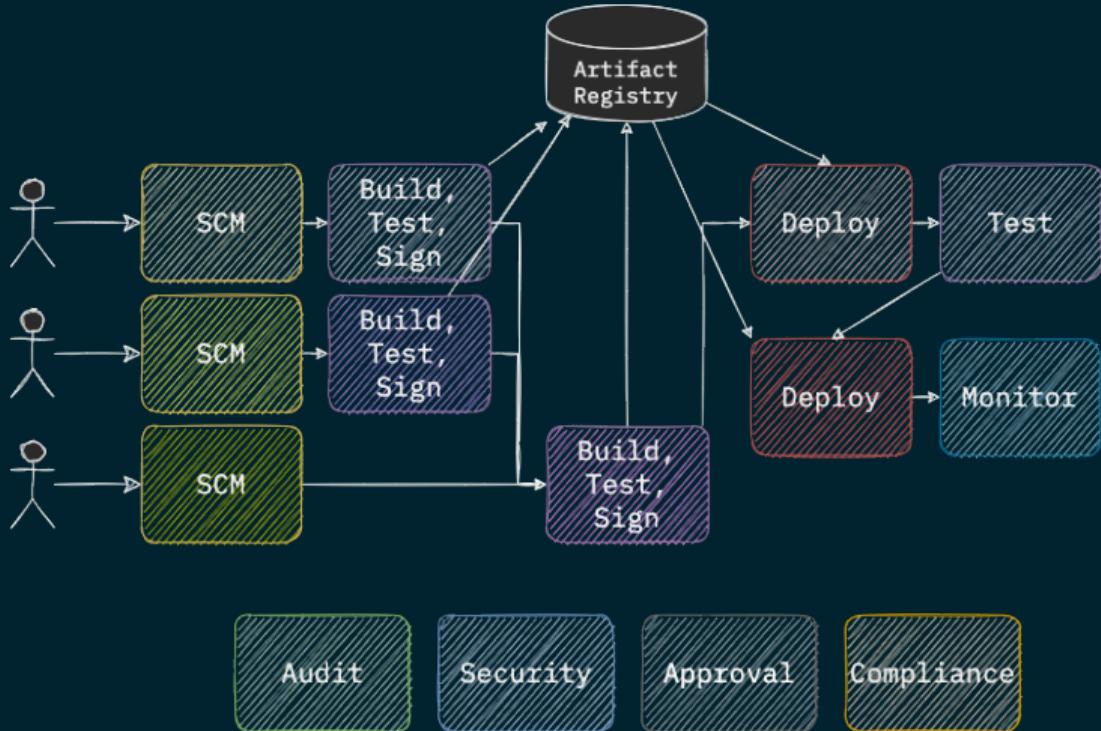
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Software Factory

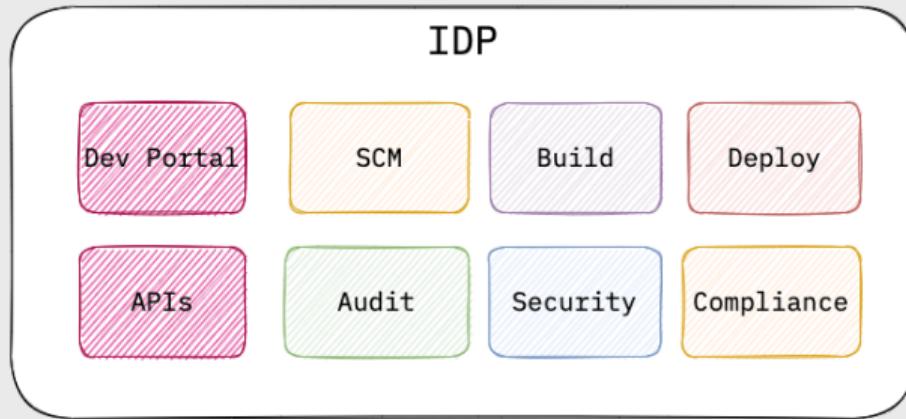


Software Factory

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

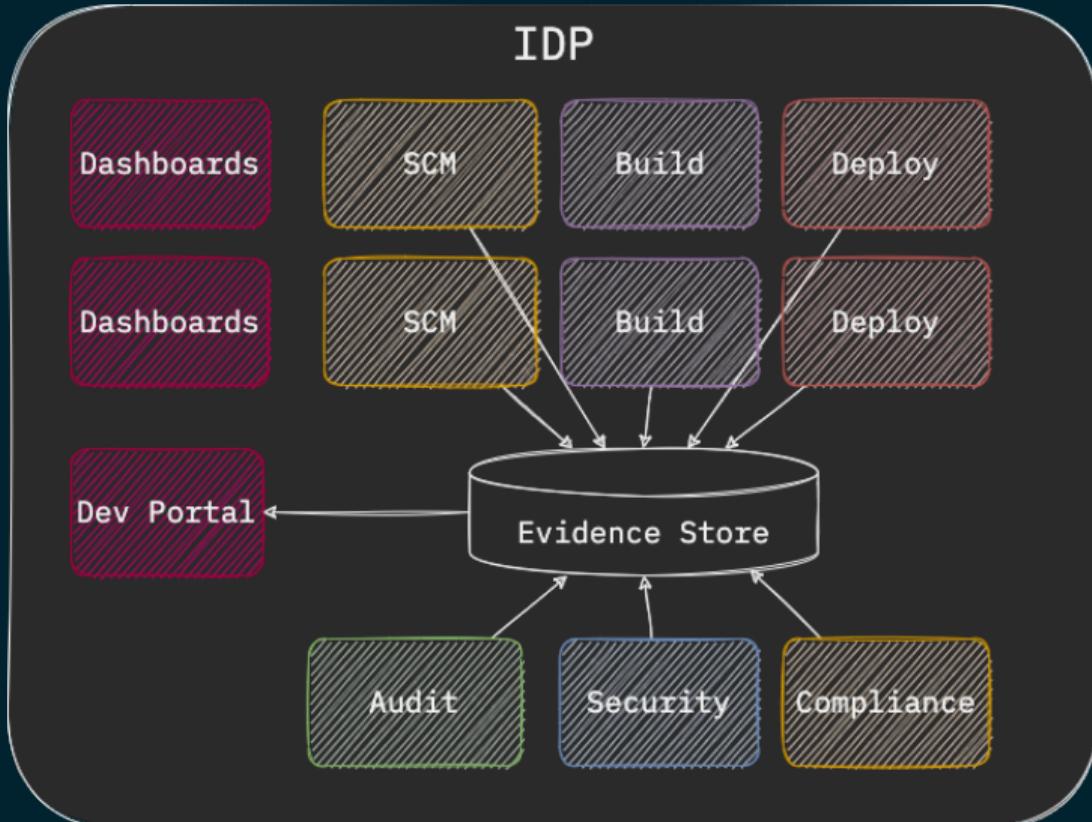


Internal Development Platform

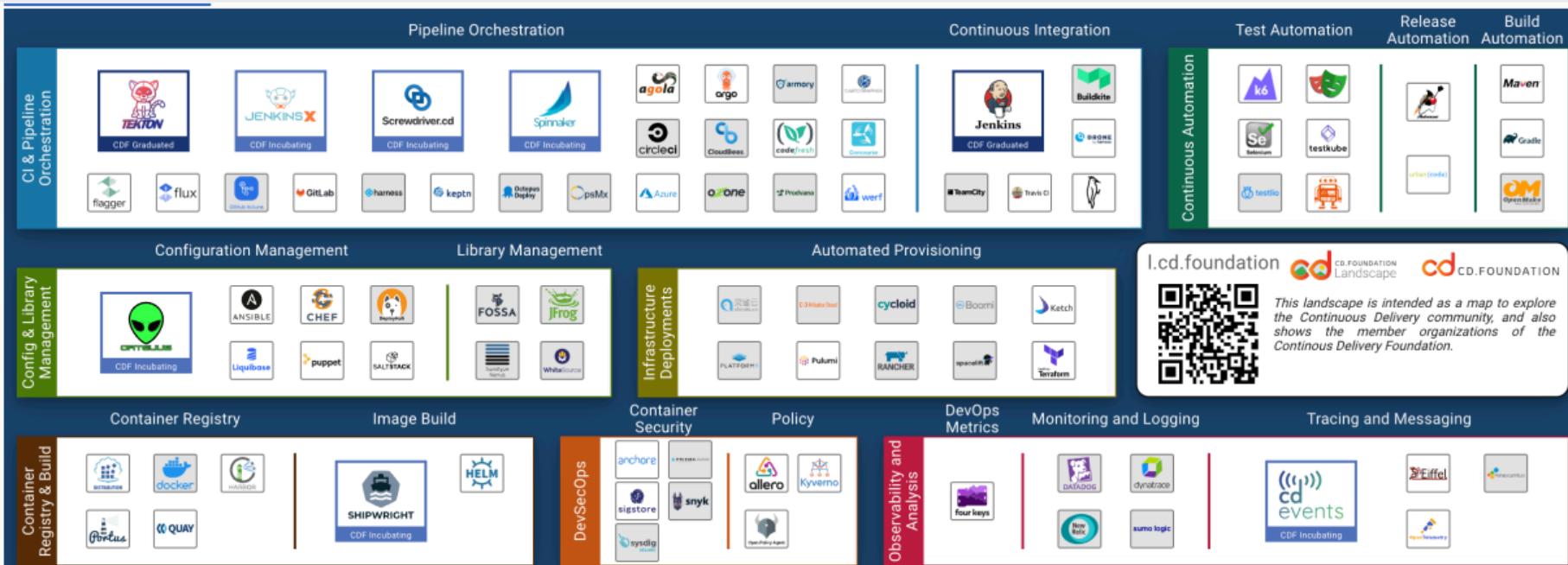


Internal Development Platform

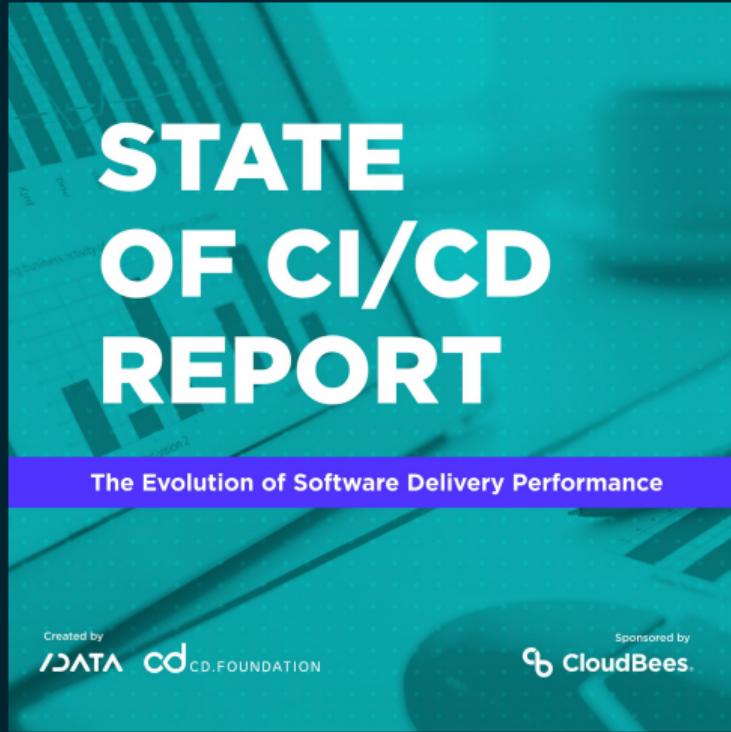
- › Lock-in effect
- › Missing/Broken Data
- › Many Dashboards



A Plethora of Tools



State of CI/CD Report 2024

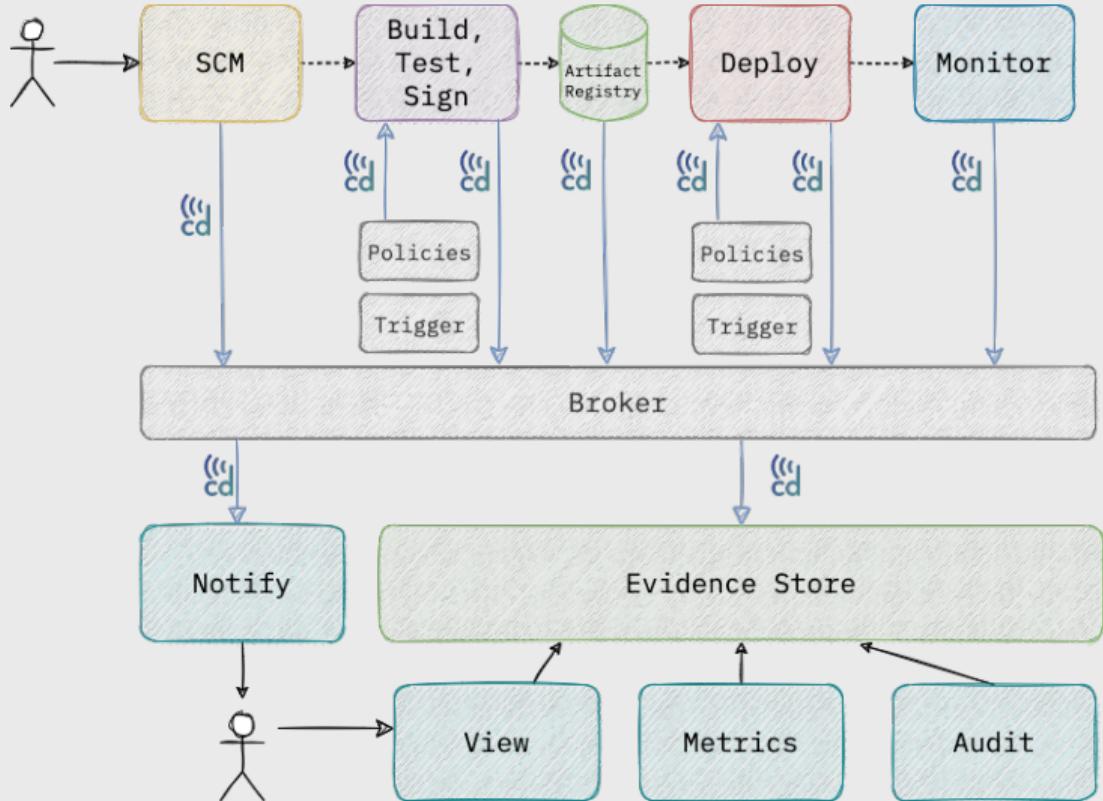




A common specification for Continuous Delivery Events

Interoperability

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



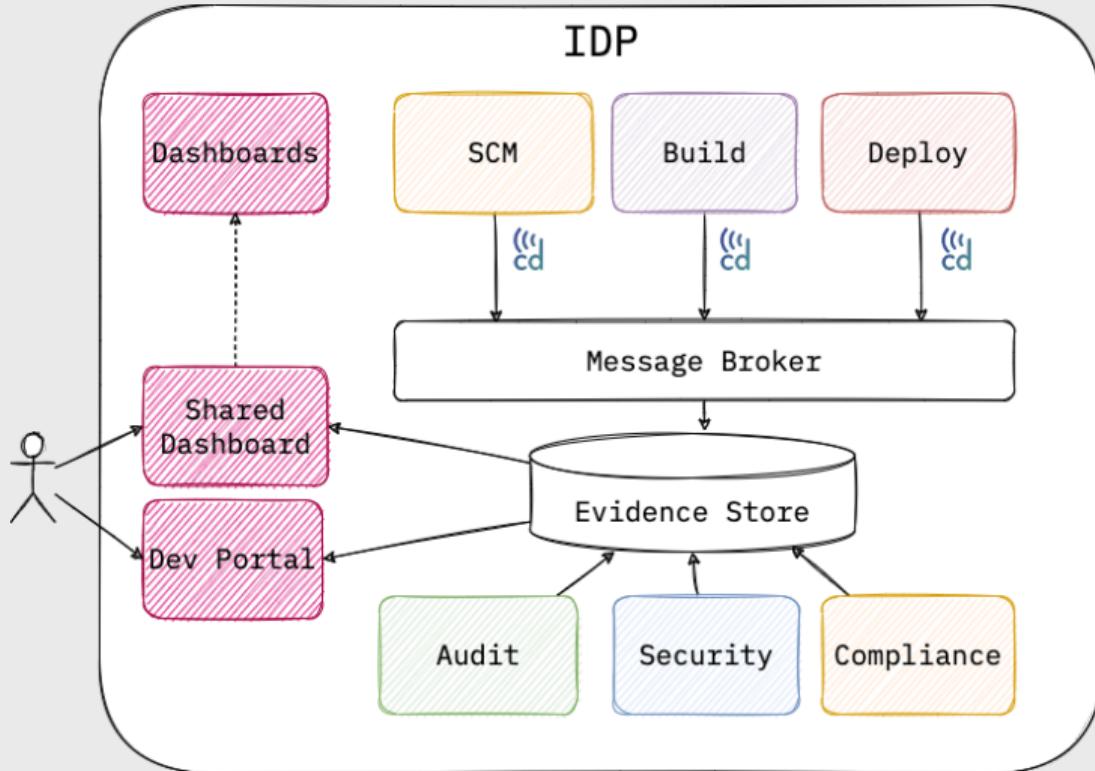
Evidence Store Supply Chain Security

- › 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



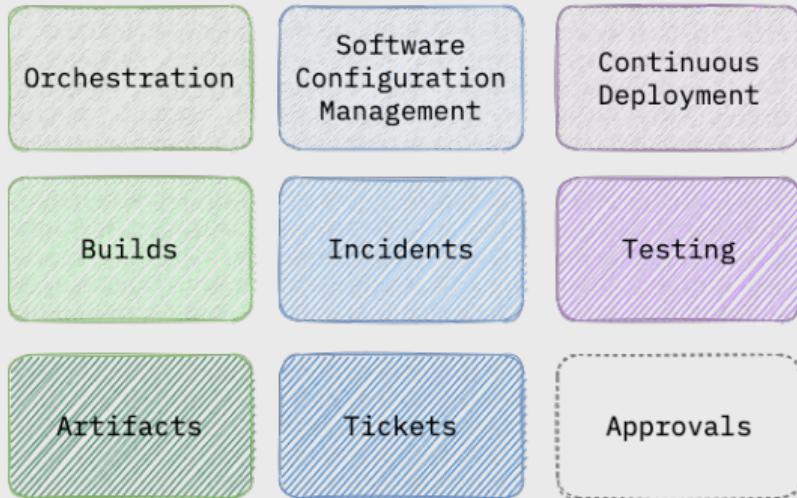
IDP and CDEvents

- › Add/swap tools
- › Consistent Data
- › Single Dashboard
- › Promotes Collaboration through Open Source
- › CDEvents and [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:

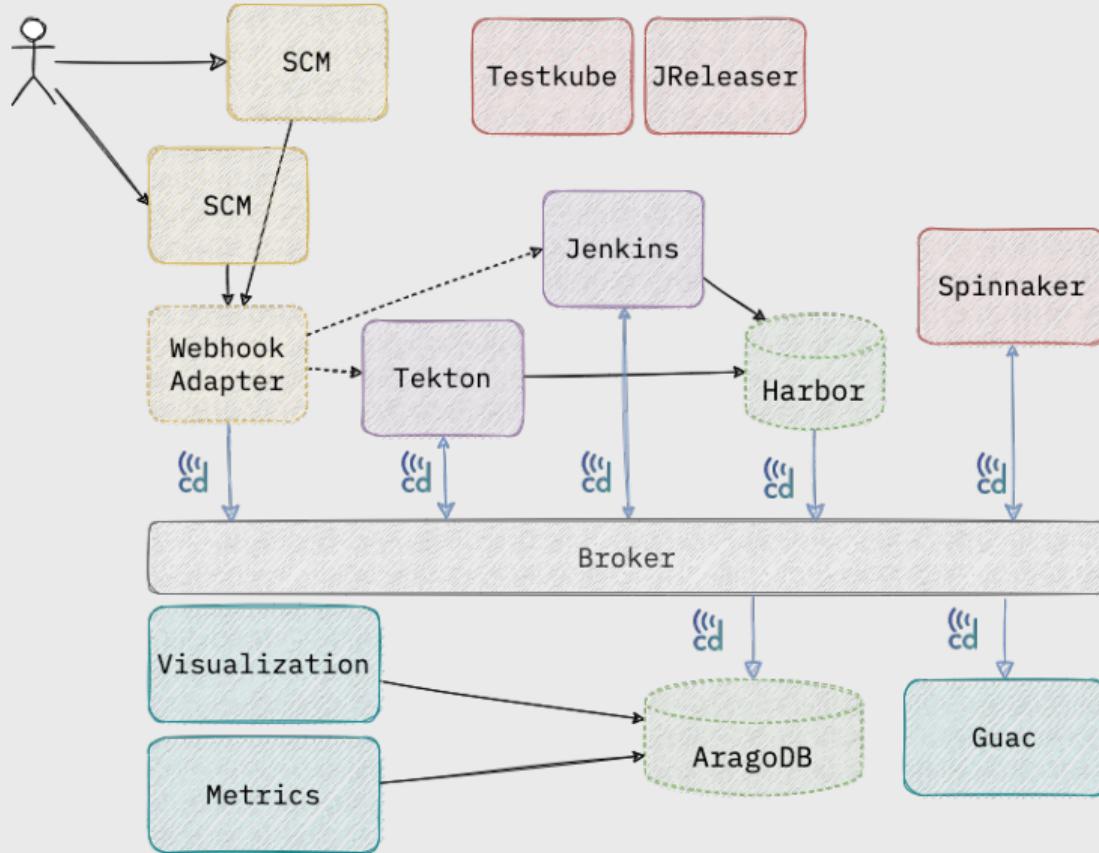
- JReleaser
- Guah.sh (OpenSSF)

Planning:

- Ortelius
- Updatecli



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
- 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

New features

- Links,
Workflow IDs
- Compositions
- Releases

Software & Architecture

- SDKs (JS,
.NET)
- Webhook
Adapter
- Visualization
- Links Service

Proof of Concept

- CDEvents +
CNOE.io
- CDEvents
Visualization

Tools:

- Complete
POCs
- Wish:
Ortelius,
Dagger, Keptn,
Screwdriver,
Shipwright



Conclusions

- › Lack of Standardization in the Continuous Delivery Space

which means

- › Complexity & Costly integrations
- › Risk of inconsistent and incomplete data
- › Developer fatigue

- › CDEvents is a common specification for Continuous Delivery Events

which means

- › Standardization
- › Flexibility & Better DevEx
- › Better supply chain security stance through data



Thank You!



References

- › cdevents.dev, github.com/cdevents
- › CDF: cd.foundation
- › CDF Landscspe: landscape.cd.foundation
- › Slides: github.com/afrittoli/cdevents_interoperability
- › Release Announcement: cd.foundation/blog/2024/04/16/cdevents-v04/
- › State of CI/CD report: cd.foundation/state-of-cicd-2024/



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