

Adopting CDEvents and Embracing Interoperability

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Session: sched.co/1aBN2



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Thank You

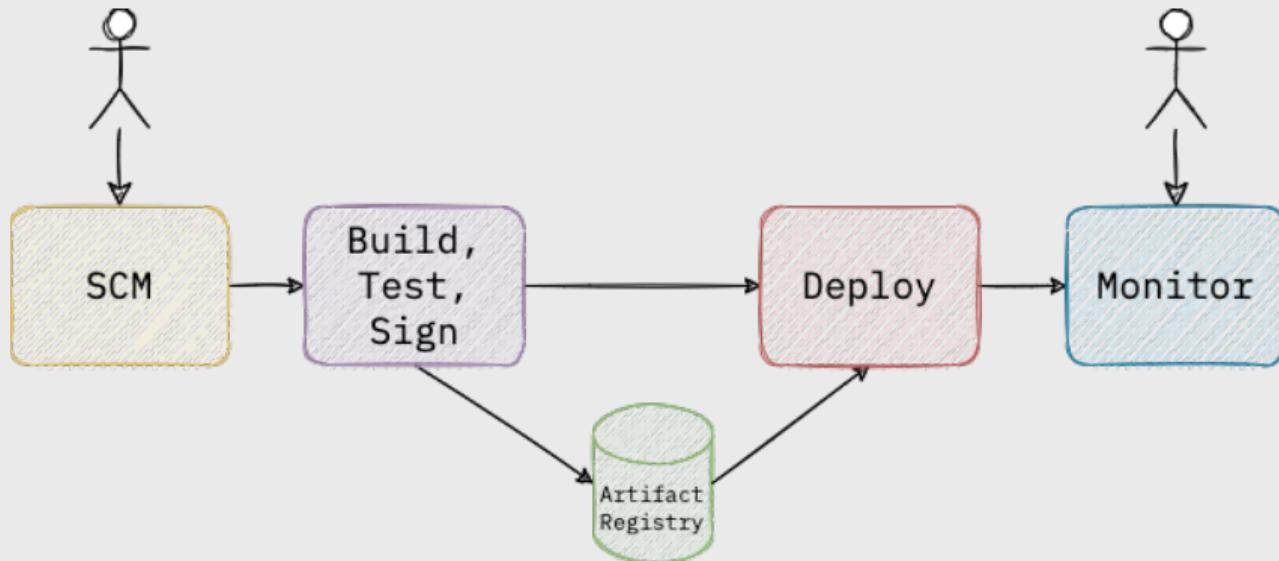
Software Factory



Photo by Jezael Mendoza, CC0

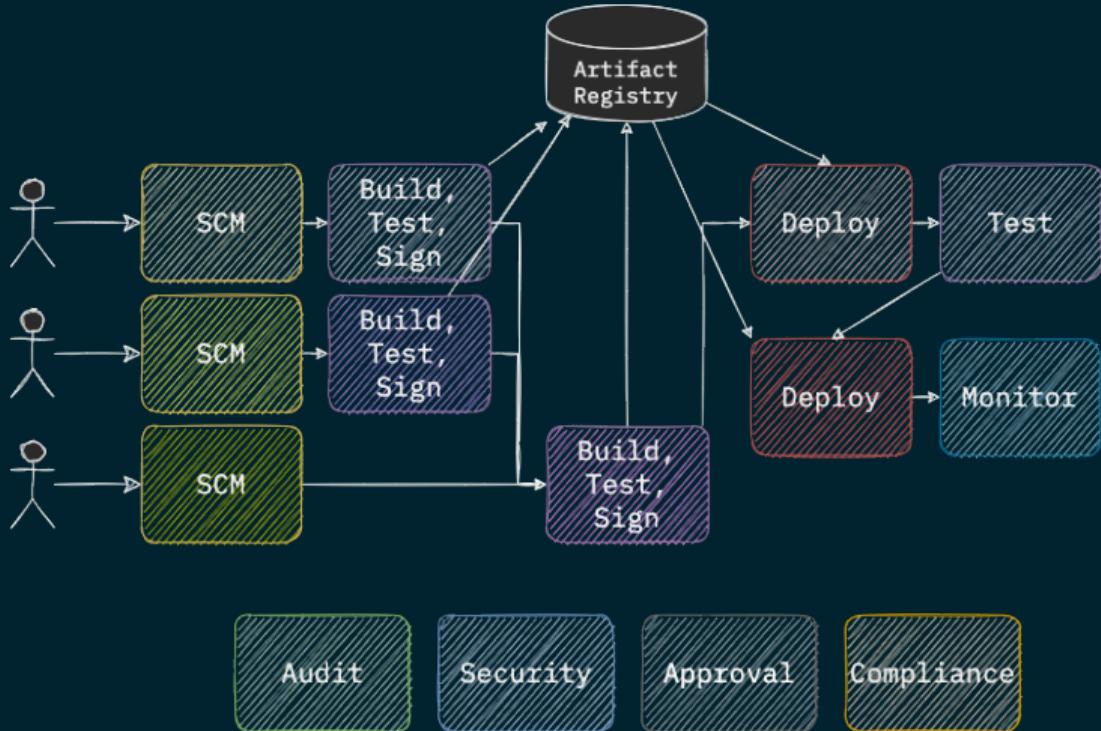
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Software Factory

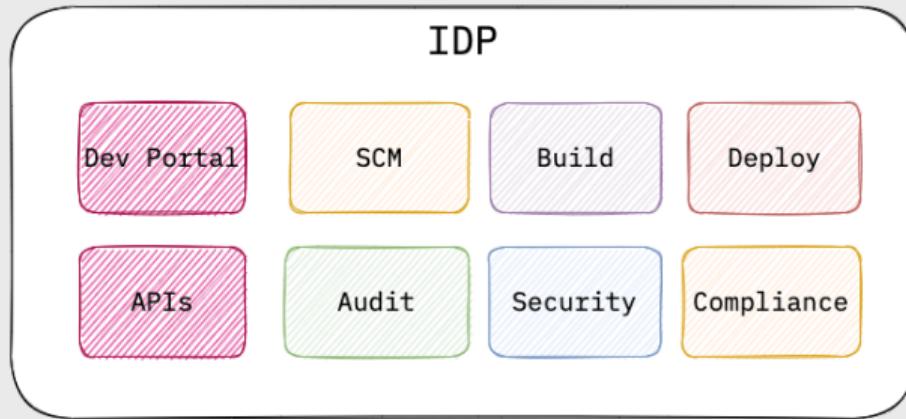


Software Factory

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

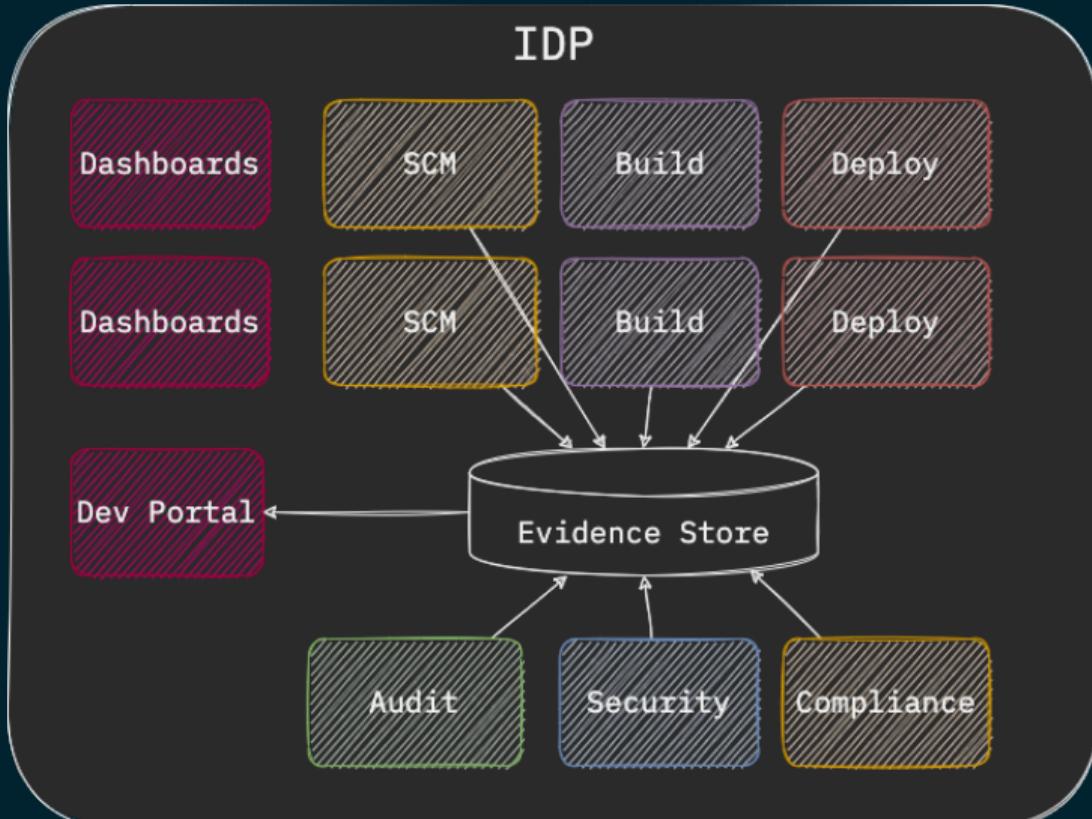


Internal Development Platform

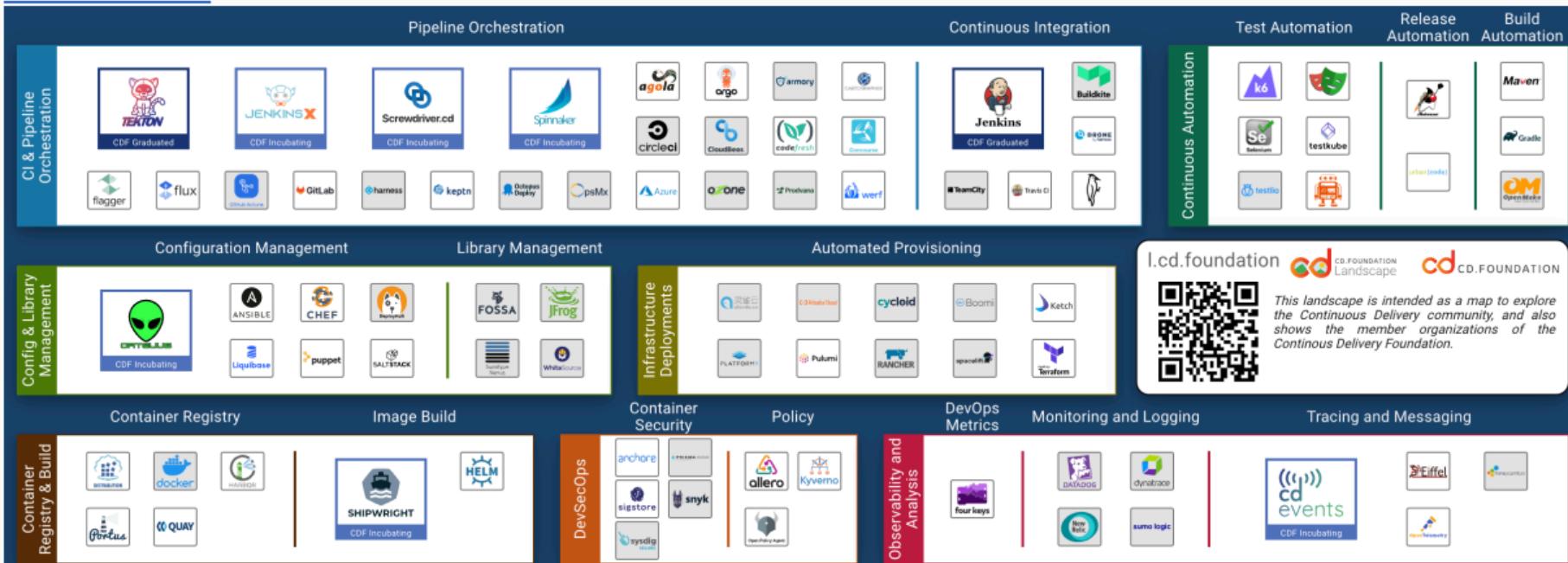


Internal Development Platform

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



A Plethora of Tools



"The State of CI/CD" report 2024



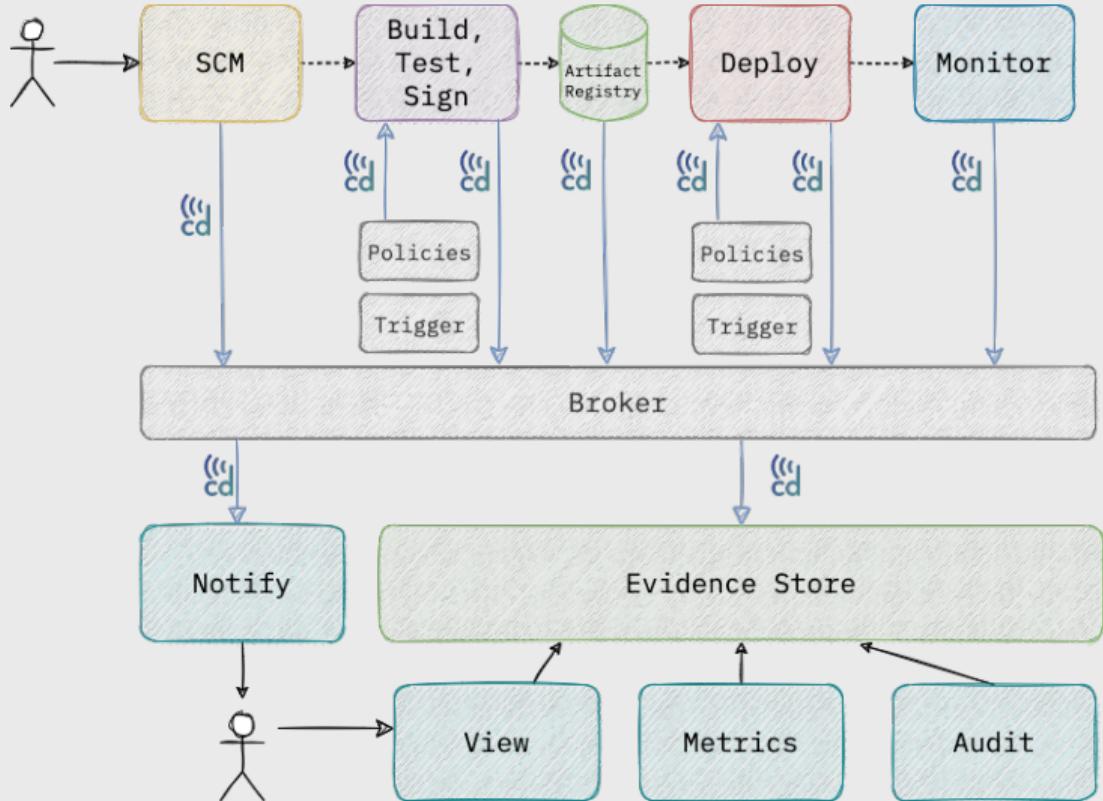


A common specification
for Continuous Delivery
Events



Interoperability

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



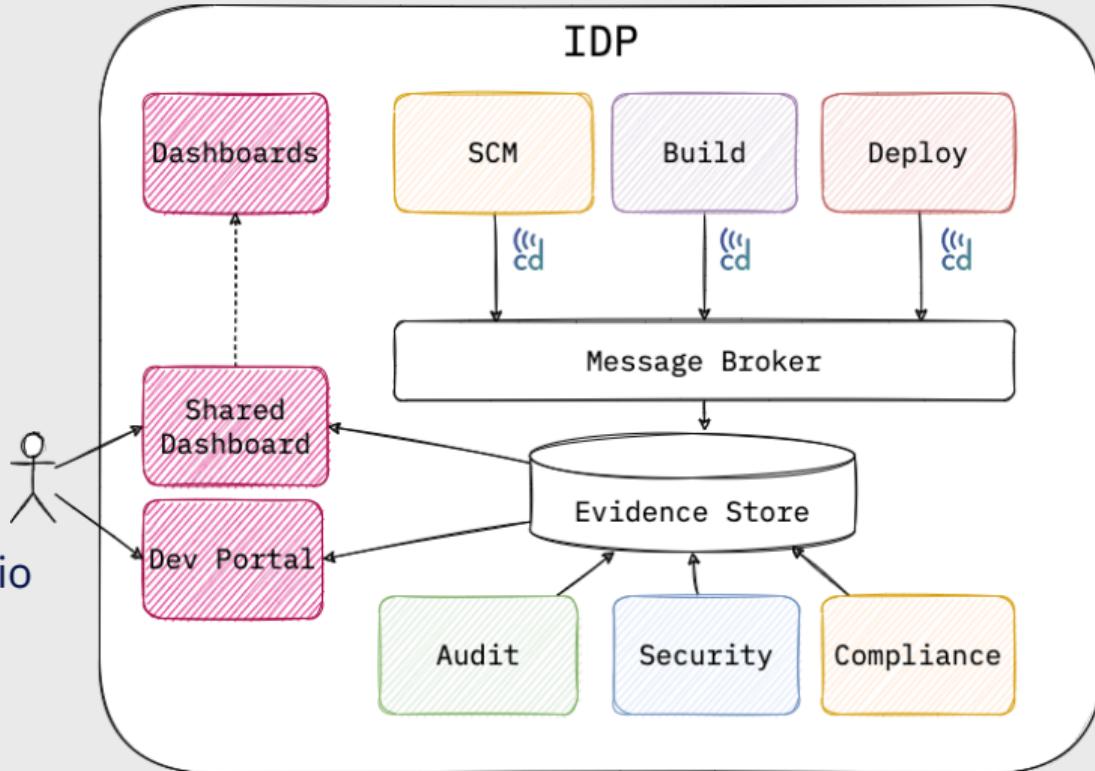
Evidence Store Supply Chain Security

- › 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



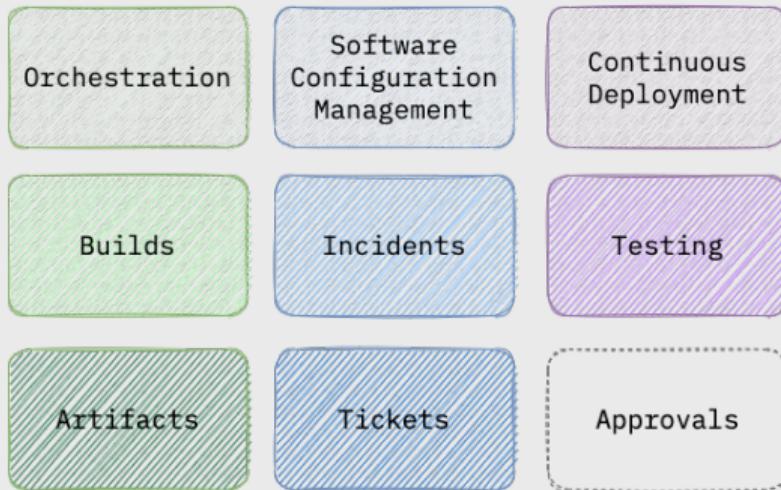
IDP and CDEvents

- › 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:

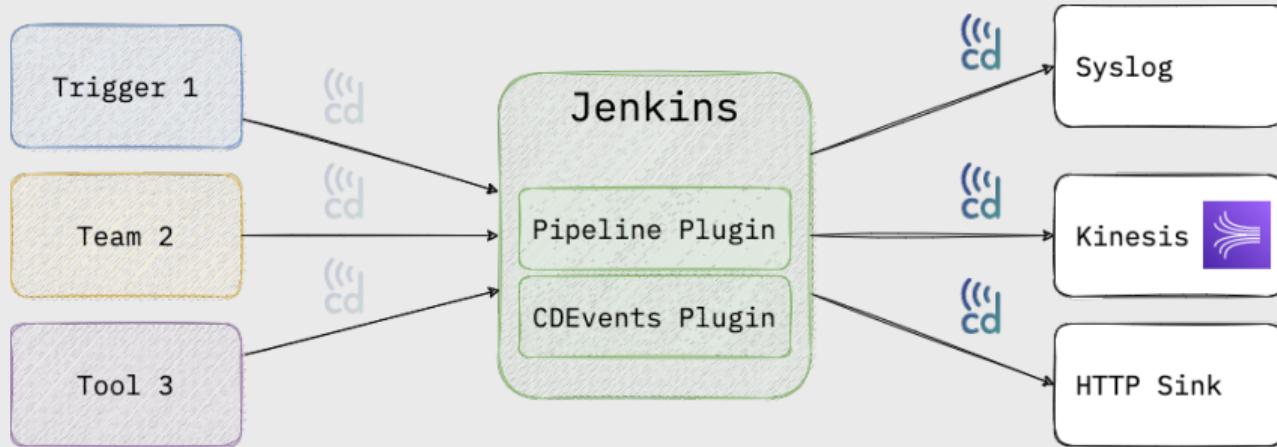
- Testkube
- Flux
- Argo CD (POC through Notifications)
- Harbour (POC)

Other Projects:

- Updatecli
- JReleaser
- Guah.sh (OpenSSF)



All Together



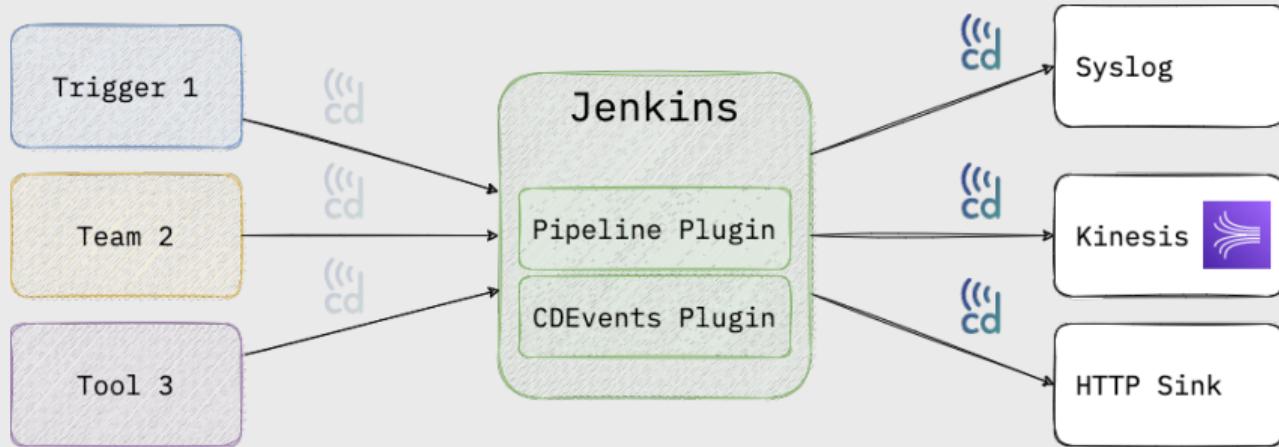
Next Steps

Support CDEvents as triggers as well.

CDEvents Core Events

PipelineRun Queued, Started, Finished
TaskRun Started, Finished

Successes and Challenges



Next Steps

Support CDEvents as triggers as well.

CDEvents Core Events

PipelineRun Queued, Started, Finished
TaskRun Started, Finished



Collaborations

- CDF, SIG Best Practices: Reference Architecture
- CNCF TAG App Delivery
- Value Stream Management Interoperability (VSMI) TC
- CDF, Workshop working group

What's New



Photo by [Josh Sorenson](#), CCO



((c)) cdevents 0.4

Linked Events:

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

Ticket Events:

- › Inception to Deployment
- › E2E Metrics
- › Ticket Based Automation
- › Interoperability

Software Supply Chain Security

- › Artifact Signed event
- › Build & Deployment Automation

Quality of life improvements

- › Improved readability
- › Examples for each event
- › Refreshed web site



Roadmap



CDEvents Roadmap v0.5 and beyond

Supply Chain Security

- SBOM,
- Provenance
- Signed Events

New features

- Links,
- Workflow IDs
- Compositions
- Releases

Software & Architecture

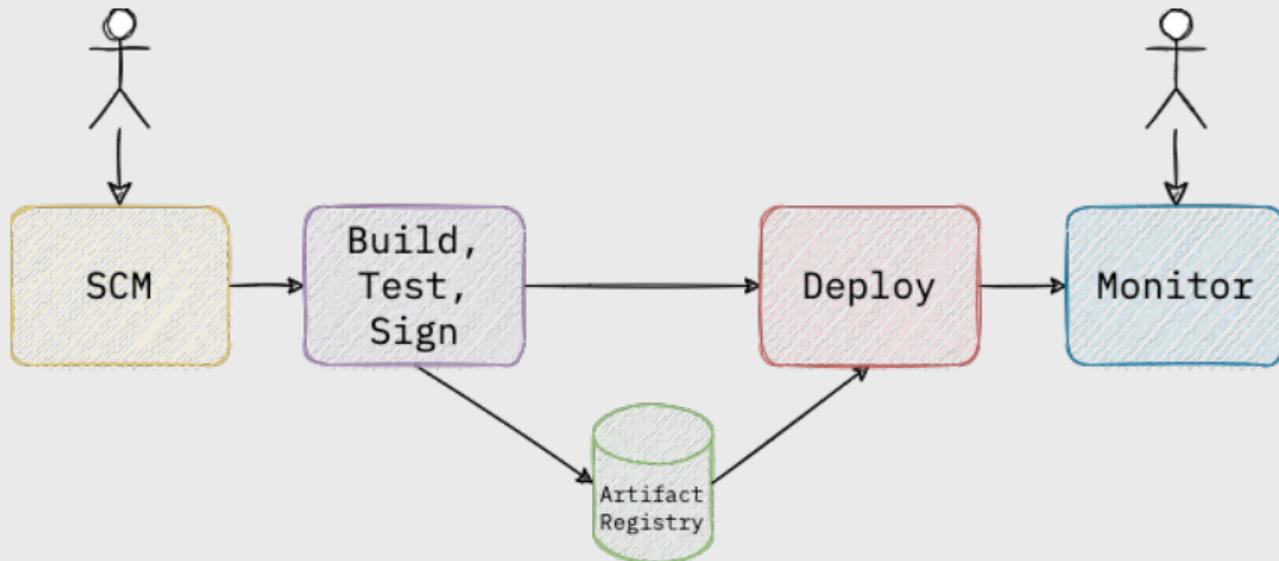
- SDKs (JS, Rust)
- Adapters
- Proof of concept
- Broker, Policy

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

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