The Road to Interoperability in CI/CD

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Openness, Integration, and Interoperability

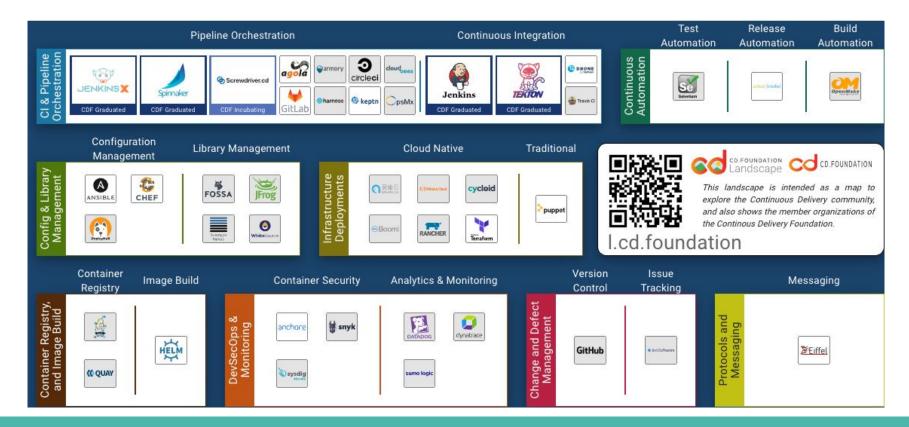
Integration => often glue code needed

- Engineering effort
- Maintenance costs
- Replacing services can be hard work

Interoperability => openly defined interfaces and metadata

- Easier access to services
- Can have multiple, independent implementations of a service's interface
- Ease of switching between implementations of a service

Continuous Delivery Landscape





Interoperability in CI/CD Context

- Pipeline standardization/languages
- Connecting/integrating pipelines
- Pipeline data for traceability/visualization
- Events in CI/CD

Continuous Delivery Foundation Interoperability Whitepaper



Case Study







Enter Continuous Delivery Foundation

CDF was founded during March 2019 and hosted by Linux Foundation

A Neutral Home for the Next Generation of Continuous Delivery Collaboration

Members from webscale, cloud, fintech, telecom, e-commerce, IT, CI/CD industries

	Hosted Projects				Special Interest Groups
Jenkins	Spinnaker	JENKINS X	TEKTON	Screwdriver.cd	Security, MLOps, Interoperability, Best Practices



Special Interest Group Interoperability

- Approved by CDF Technical Oversight Committee during January 2020
- Aims to increase collaboration to address interoperability challenges



Industries

Webscale
Cloud
Telecommunications
E-Commerce
Entertainment
CI/CD
IT Operations
Software



Progress so far

• First contribution to CI/CD Domain: "Rosetta Stone for CI/CD"

High Lored

Released the first version of the SIG Roadmap



Established Events in CI/CD Workstream



Initiated the work on Standardized Metadata



Worked on a whitepaper which will be released soon by CDF





Future

- Exploring reusable libraries and providing home for them
- Collaborating with CDF End User Council on user challenges and needs
- and the interoperability challenges you bring in...



Conclusions

- Most of the work in CI/CD domain is driven by communities
- Ideas incubated and specifications developed by communities are candidates to become "de-facto standards" (e.g. cloudevents)
- Cross collaboration and pollination across communities and industries is key to addressing challenges
- Continuous Delivery Foundation provides neutral home for collaboration

Q&A

Links

- CD Foundation
- CDF Continuous Delivery Landscape
- CDF SIG Interoperability