

# From Zero to CD with Tekton



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# IBM Cloud Native Day

An IBM Community Virtual Conference



# Agenda



Introduction

From 0 to CD

Roadmap

Q&A



# Introduction



Photo by Mike Benna, CC0



# Tekton is an open-source framework for creating CI/CD systems

Cloud Native  
Serverless,  
Scalable  
Pipelines



Standardization  
Built In Best  
Practices  
Maximum  
Flexibility

Core Projects  
➤ Pipeline  
➤ Triggers  
Tooling:  
➤ CLI *tkn*  
➤ Dashboard  
➤ Operator

Discovery:  
➤ Catalog  
➤ Hub  
Adds-on:  
➤ Results  
➤ Chain  
➤ Experiments

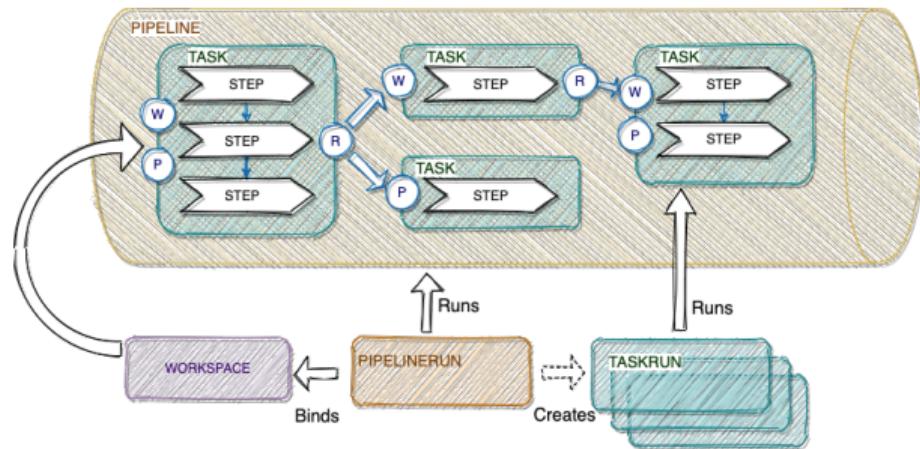


# A bit of history

- › From Knative Built, to Pipeline
- › Extend the k8s API with CRDs
- › Tekton and the CDF



- › Definitions: Step, Task, Pipeline
- › Bindings: Workspaces, Parameters, Results
- › Execution: TaskRun, PipelineRun



# From 0 to CD



# Install

- › Install
- › Operator
- › Nightly
- › Multi-arch



# Authoring

- › pipeline
- › catalog
- › hub
- › params, results, workspaces <- docs on website



# Watching

- › kubectl
- › tkn
- › Dashboard
- › runtime aspects



# Launching

- › triggers
- › setup a github webhook
- › run a build on push
- › filtering: CEL, custom, when expressions



# Monitoring

- › unattended execution, we need monitoring
- › event
- › cloudevents
- › notifications (github, slack)



# Experimental

- › loops
- › wait
- › CELRun / pip (?)



# Cleanup

- execution history
- results



# Roadmap



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# TEP (optional)

- › Design principles
- › TEP process
- › TEP table



# Dogfooding (optional)

- › Using Tekton for Tekton
- › Source of examples
- › Source of bug discovery, feature requests



# Roadmap

- › Towards v1
- › What's coming in 2021
- › Release processes and cadence



A photograph of a fast-moving stream flowing through a dense forest. The water is blurred, indicating motion, and the surrounding trees are bare, suggesting a winter or early spring setting. Mossy rocks are visible in the water.

# Thank You! Questions?

# References

- › Come and Join Us at Tekton!
- › Tekton community: [github.com/tektoncd/community](https://github.com/tektoncd/community)
- › Slides: [github.com/afrittoli/zero\\_to\\_tekton](https://github.com/afrittoli/zero_to_tekton)
- › Tekton: [tekton.dev](https://tekton.dev)
- › Tekton on GitHub: [github.com/tektoncd](https://github.com/tektoncd)
- › Tekton Results: [github.com/tektoncd/results](https://github.com/tektoncd/results)
- › Tekton Hub: [hub.tekton.dev](https://hub.tekton.dev)
- › Performance TEP: [TEP-0036](#)
- › Metrics TEP: [TEP-0006](#)

