Intro to Tekton

Mission

Industry-standard, cloud-native CI/CD platform components and ecosystem.

What is “cloud native”?

Cloud Native Computing Foundation (CNCF)

Microservices in containers } **Images / Containers**

Dynamically orchestrated

Optimized resource utilization } **(Often) Kubernetes**

For who(m)?

Porcelain vs Plumbing

Toilet vs. Plumbing Underneath

For who(m)?

Engineers building CI/CD systems

Stop reinventing the wheel!

- Scalable
- Serverless
- Cloud Native

Engineers using CI/CD (everyone)

Catalog of reusable components

- Quick assembly
- Tekton conformant systems
  - Interoperability
  - Portability (no lock-in)
- Ecosystem of tools

Tekton Pipelines

Existing Industry standard: Container images

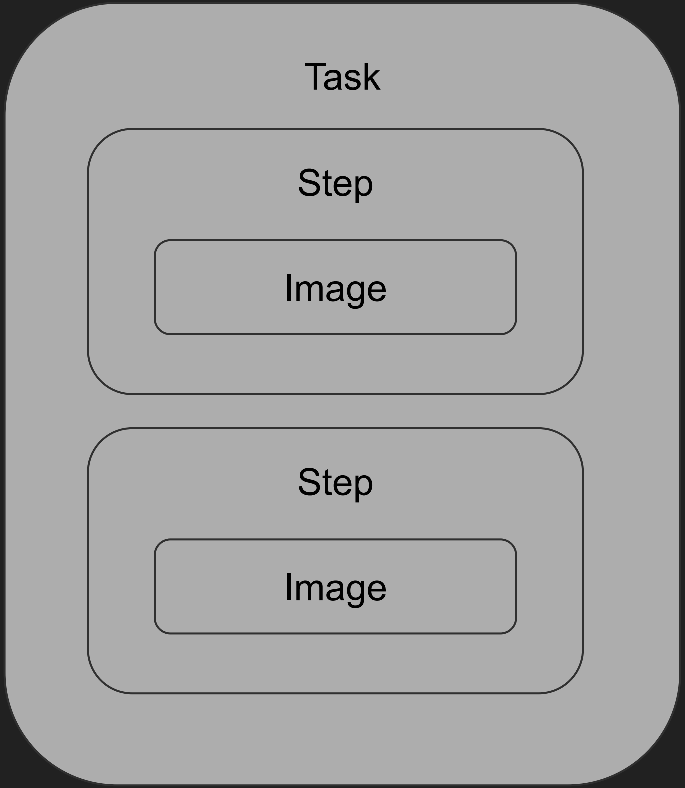
Image

Steps:
Kubernetes container spec, adds stuff like:

- Environment vars
- Arguments

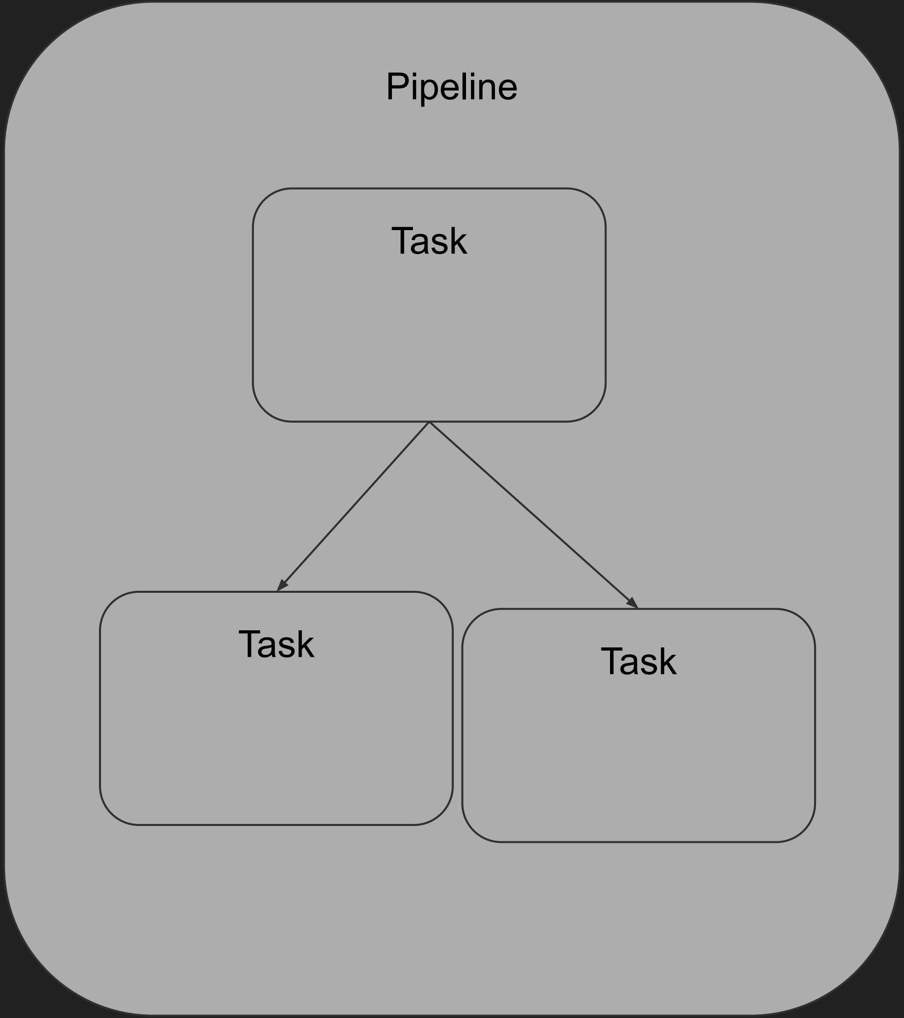
Task, adds:

- Steps in order
- Params
- Workspaces
- Results



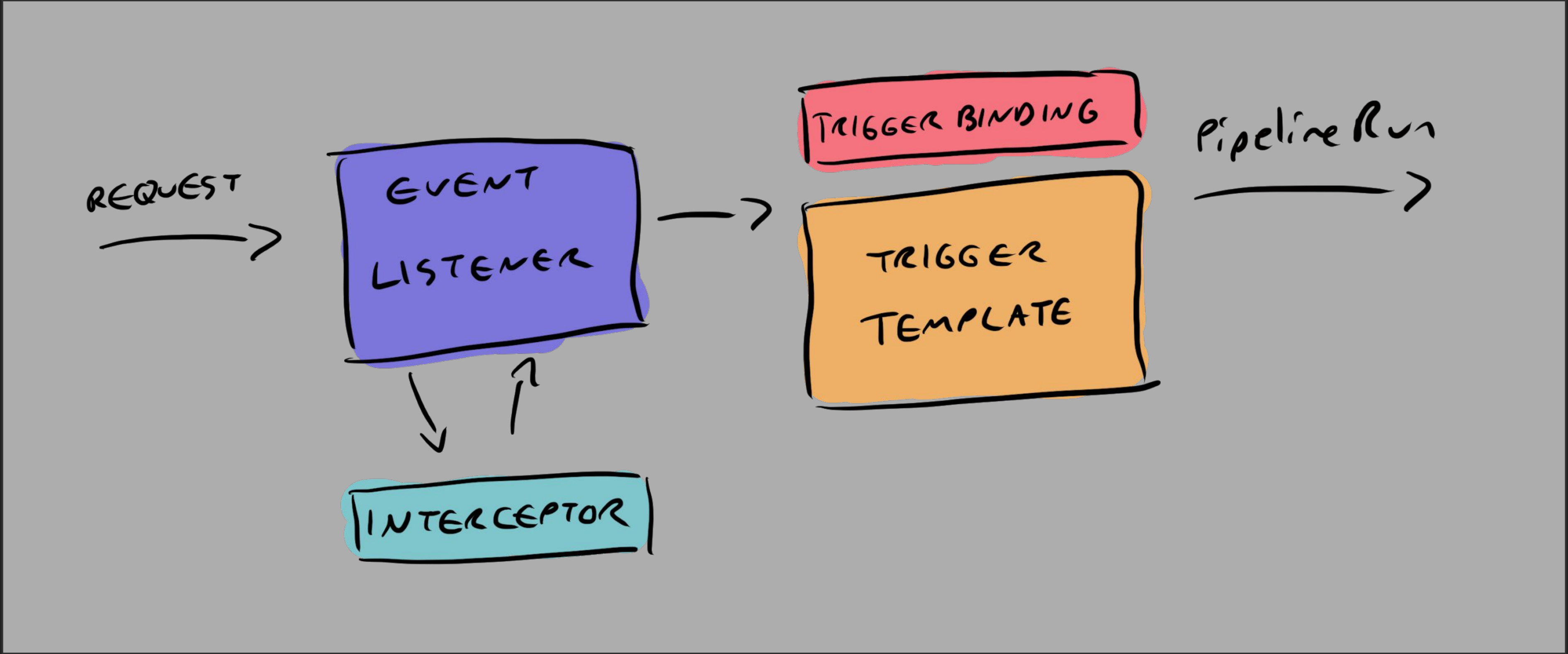
Pipeline, adds:

- Graph
- Inputs + outputs:
  - Workspaces
  - Results -> Params
- Conditions
- On Failure



Tekton Triggers

Tekton Triggers Types



Tekton Catalog

Tekton Catalog

- Images
- Tasks
- Pipelines
- Conditions
- TriggerBindings
- TriggerTemplates
- Trigger interceptors

- Sandbox + Official
- Well tested
- Well documented
- Supporting the catalog = Tekton conformance
- Versioning + referring to Tasks:
  - taskRef ->
    - OCI artifact
    - Git repo
    - Anything really