TEKTON, TEKTON, TEKTON...

TEKTON

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ParisJug Young Blood 2020

SUMMARY

- PRESENTATION
  - CI/CD
  - TEKTON
- HOW IT WORKS ?
  - MAIN COMPONENTS
  - CUSTOM RESOURCES
- DEMONSTRATION
  - PIPELINE
  - DEMO ON OPENSHIFT

PRESENTATION

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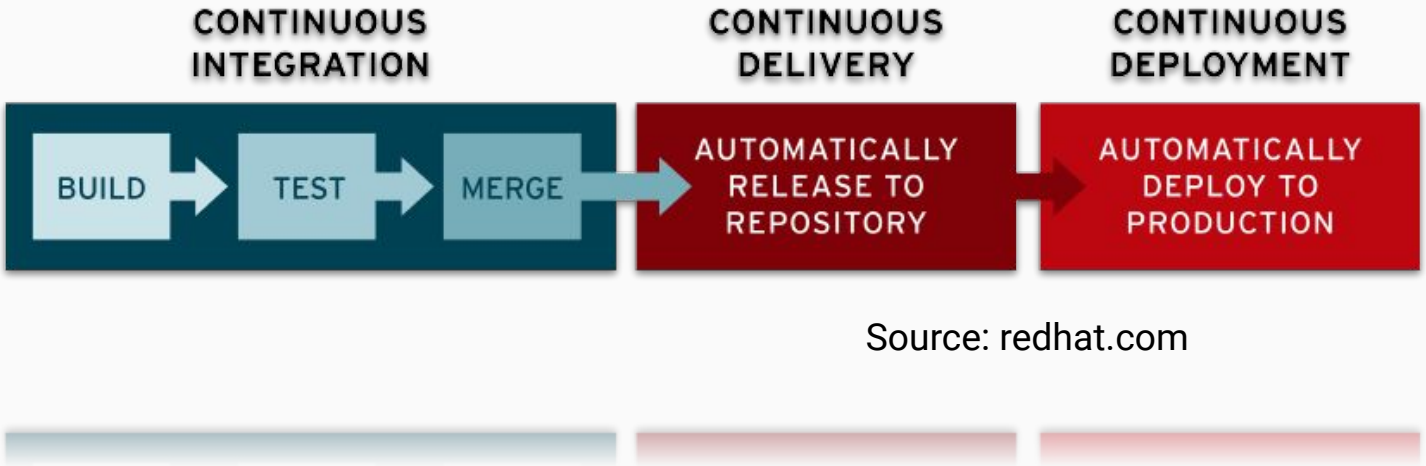
CI/CD

- Introducing automation into application lifecycle
  - Building, Testing, Versioning, Deploying, Monitoring



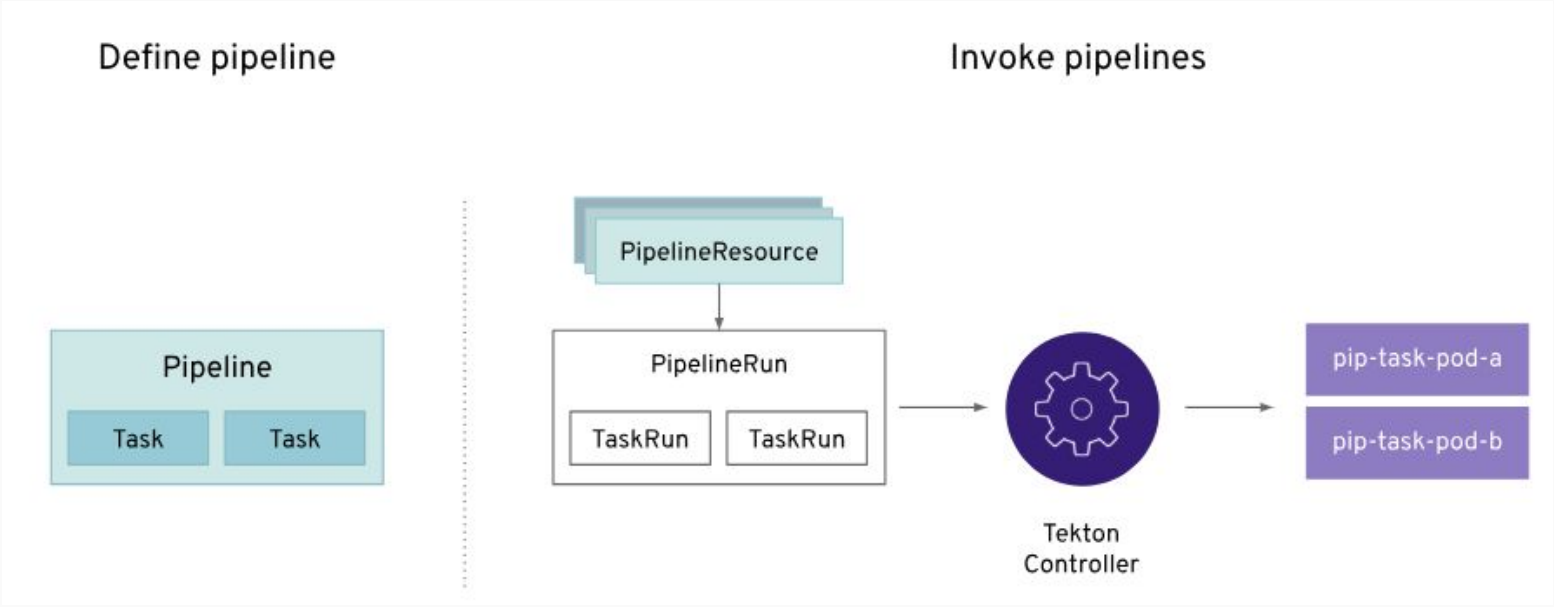
Source: redhat.com

TEKTON

- Kubernetes-native
- Open-source CI/CD framework
- Enables automating deployments across multiple platforms (Kubernetes, serverless, VMs, etc)
- Abstracting away the underlying infrastructure

HOW IT WORKS?

MAIN COMPONENTS

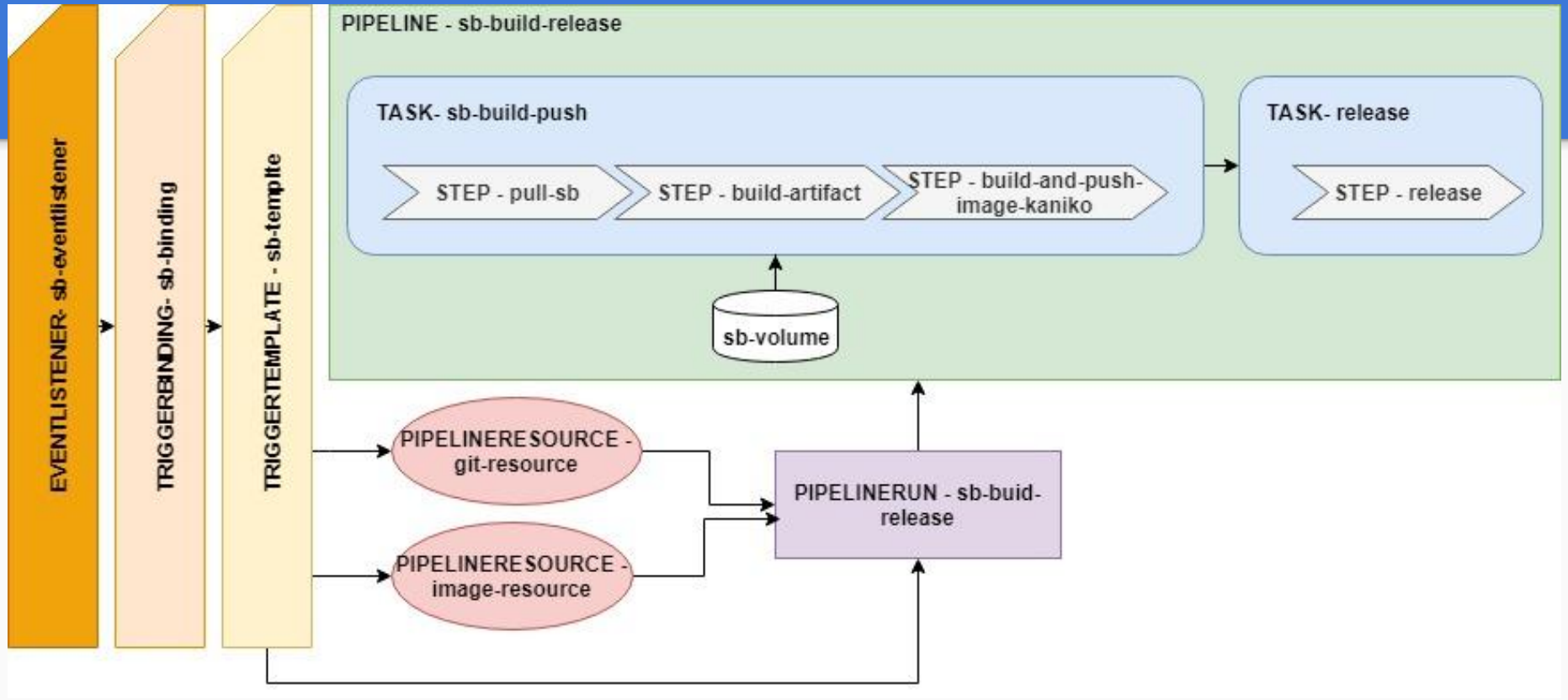


Source: https://github.com/openshift/pipelines-tutorial

CUSTOM RESOURCES

- **Task**: a reusable, loosely coupled number of steps
- **Pipeline**: the definition of the pipeline and the Tasks that it should perform
- **PipelineResource**: inputs (e.g. git repository) and outputs (e.g. image registry) to and out of a pipeline or task
- **TaskRun**: the execution and result of running an instance of task
- **PipelineRun**: the execution and result of running an instance of pipeline
- **TriggerTemplate**: Templates resources to be created (e.g. Create PipelineResources and PipelineRun that uses them)
- **TriggerBinding**: Validates events and extracts payload fields
- **EventListener**: Connects TriggerBindings and TriggerTemplates into an addressable endpoint (the event sink)

DEMONSTRATION


EVENTLISTENER- sb-eventlistener
TRIGGERBINDING- sb-binding
TRIGGERTEMPLATE - sb-template
PIPELINE - sb-build-release
TASK- sb-build-push
STEP - pull-sb
STEP - build-artifact
STEP - build-and-push-image-kaniko
TASK- release
STEP - release
sb-volume
PIPELINERESOURCE - git-resource
PIPELINERESOURCE - image-resource
PIPELINERUN - sb-buid-release

DEMO ON OPENSHIFT

https://github.com/saberkan/tekton-tutorial.git

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