Day 10

Reference

You may check my medium blog about CI/CD with Tekton on Openshift

https://medium.com/tektutor/openshift-ci-cd-with-tekton-faa88ba45656

Lab - Creating a declarative CI/CD Pipeline using TekTon knative Framework in Red Hat Openshift

```
cd ~/openshift-tekton-june2024
git pull
cd Day10
cat java-cicd-pipeline.yml
tkn task list
tkn taskrun list
tkn pipeline list
tkn pipelinerun list
oc apply -f java-cicd-pipeline.yml
tkn task list
tkn taskrun list
tkn pipeline list
tkn pipelinerun list
cat java-cicd-pipeline-run.yml
oc create -f java-cicd-pipeline-run.yml
tkn pipelinerun list --showlog
```

Expected output

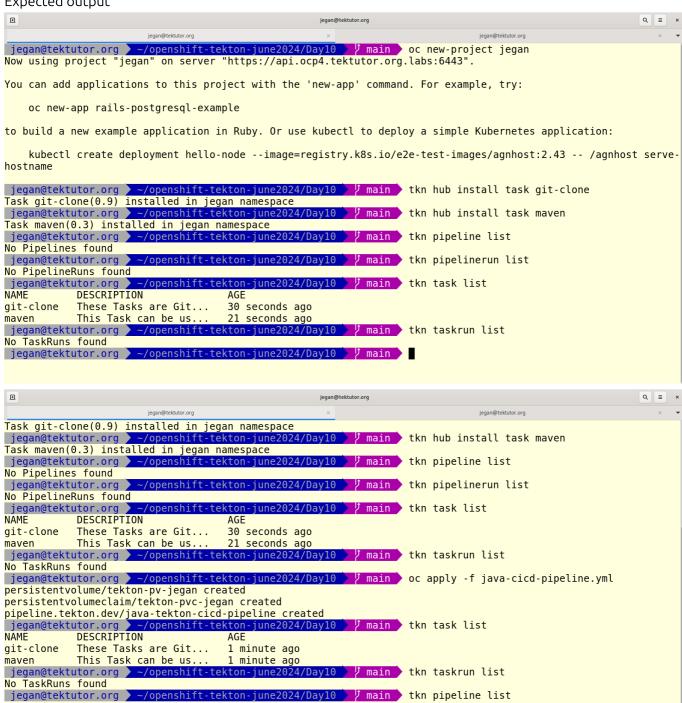
NAME

java-tekton-cicd-pipeline

jegan@tektutor.org > ~/o

No PipelineRuns found jegan@tektutor.org AGE

21 seconds ago



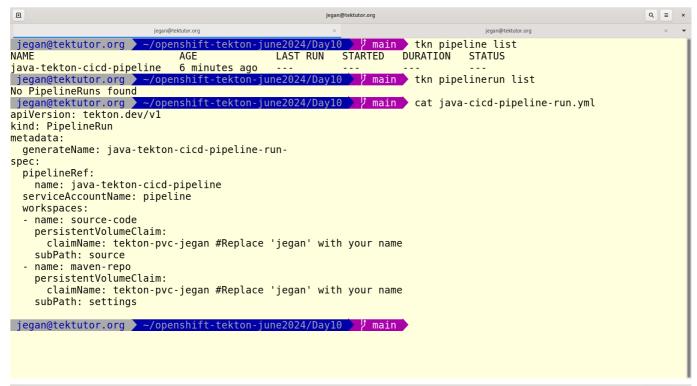
STARTED

enshift-tekton-june2024/Day10 🄰 main 🕨 tkn pipelinerun list

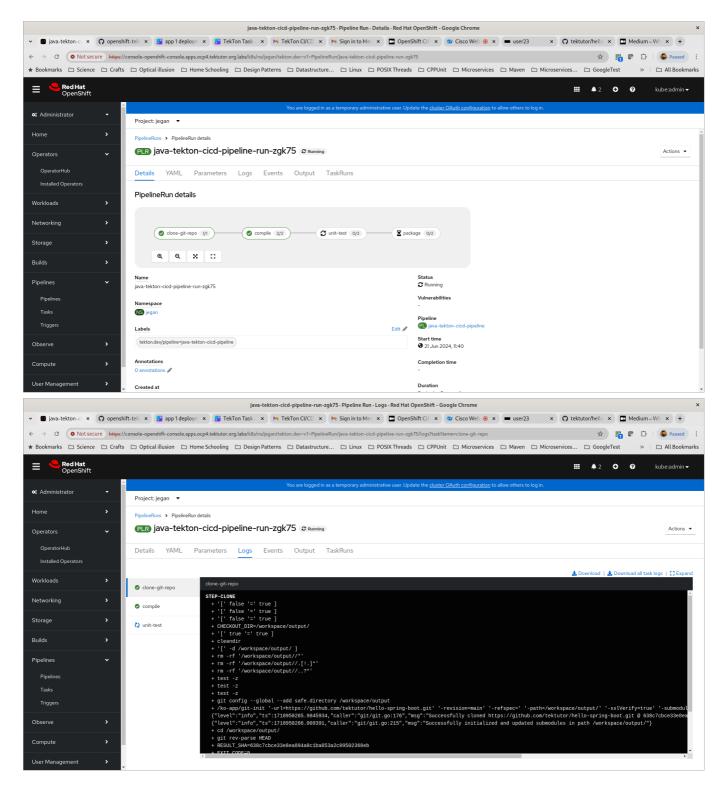
LAST RUN

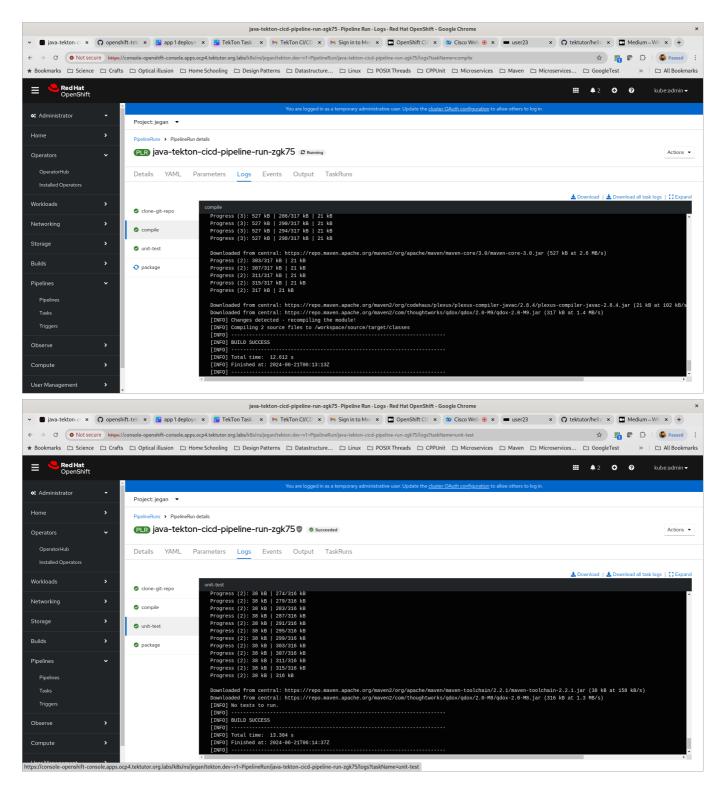
DURATION

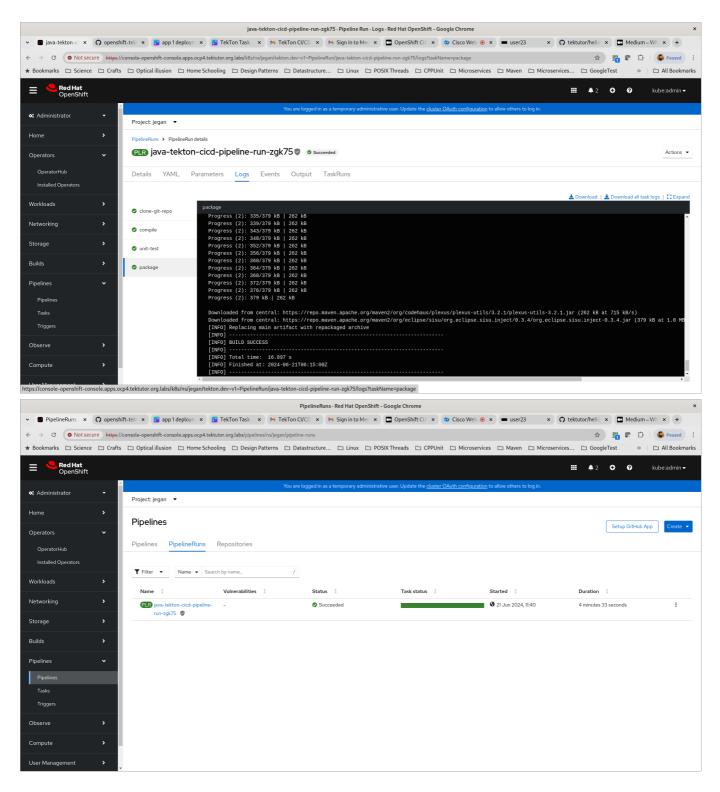
STATUS

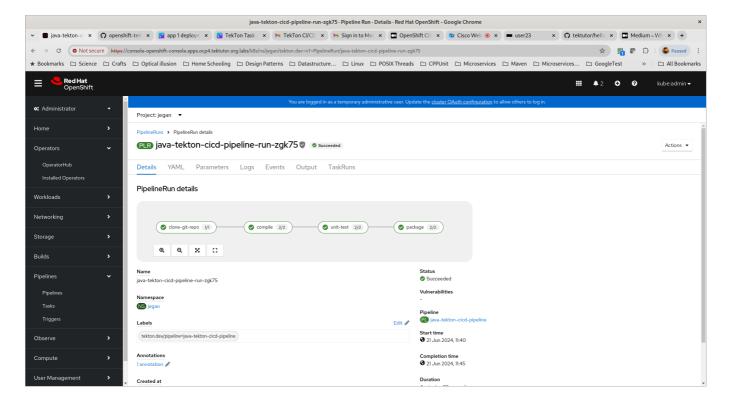


```
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                                                                                                                                                                             jegan@tektutor.org
                                                                                                                                                                                                                                                                                                                                                            Q =
                                                                                                                                                                                                                                                                   jegan@tektutor.org
                                                                                                       STARTED
                                                                                                                                                  DURATION
                                                                                                                                                                               STATUS
 NAME
 java-tekton-cicd-pipeline-run-zgk75
                                                                                                       9 seconds ago
   jegan@tektutor.org
                                                                                            tekton-june2024/Day10 / main tkn pipelinerun logs -f java-tekton-cicd-pipeline-run-zgk75
                                                                                    false
                                                                                                               true
    clone-git-repo
                                                                            [' false '=' true
[' false '=' true
   clone-git-repo
                                                clone
  clone-git-repo :
                                                clone]
                                                                  + CHECKOUT_DIR=/workspace/output/
+ '[' true '=' true ]
   clone-git-repo
                                                clone]
  [clone-git-repo :
                                                clonel
   clone-git-repo
                                                clone]
                                                                   + cleandir
                                                clone] + '[' - d /workspace/output/ ]
clone] + rm -rf '/workspace/output//*'
clone] + rm -rf '/workspace/output//.[!.]*
clone] + rm -rf '/workspace/output//..?*'
  [clone-git-repo :
   clone-git-repo
   clone-git-repo :
   clone-git-repo :
  [clone-git-repo :
[clone-git-repo :
                                                clone] + test -z
clone] + test -z
[clone-git-repo : clone] + test -z
[clone-git-repo : clone] + test -z
[clone-git-repo : clone] + git config --global --add safe.directory /workspace/output
[clone-git-repo : clone] + /ko-app/git-init '-url=https://github.com/tektutor/hello-spring-boot.git' '-revision=main' '-refspec=' '-path
=/workspace/output/' '-sslVerify=true' '-submodules=true' '-depth=l' '-sparseCheckoutDirectories='
[clone-git-repo : clone] {"level":"info","ts":1718950265.9845934,"caller":"git/git.go:176", "msg":"Successfully cloned https://github.com
/tektutor/hello-spring-boot.git @ 638c7cbce33e8ea894a8c1ba853a2c09502368eb (grafted, HEAD, origin/main) in path /workspace/output/"}
[clone-git-repo : clone] {"level":"info","ts":1718950266.009391,"caller":"git/git.go:215","msg":"Successfully initialized and updated su
bmodules in path /workspace/output/"}
[clone-git-repo : clone] + cd /workspace/output/
  [clone-git-repo : clone] + cd /workspace/output/
[clone-git-repo : clone] + git rev-parse HEAD
[clone-git-repo : clone] + RESULT_SHA=638c7cbce33e8ea894a8c1ba853a2c09502368eb
[clone-git-repo : clone] + RESULT_SHA=638C7cbce33e8ea894a8c1ba853a2c09502368eb
[clone-git-repo : clone] + EXIT_CODE=0
[clone-git-repo : clone] + '[' 0 ']=' 0 ]
[clone-git-repo : clone] + git log -1 '--pretty=%ct'
[clone-git-repo : clone] + RESULT_COMMITTER_DATE=166361939
[clone-git-repo : clone] + printf '%s' 1666361939
[clone-git-repo : clone] + printf '%s' 638c7cbce33e8ea894a8c1ba853a2c09502368eb
[clone-git-repo : clone] + printf '%s' https://github.com/tektutor/hello-spring-boot.git
```









Lab - Triggering Tekton Pipeline using GitHub polling

- We need to install tekton-polling operator
- this helps triggering pipeline on local openshift setup
- In case of local openshift setup, GitHub won't be able to invoke the Openshift public route url, hence the only way to trigger pipeline is using the polling operator

Let's install the polling operator

```
oc apply -f https://github.com/bigkevmcd/tekton-polling-
operator/releases/download/v0.4.0/release-v0.4.0.yaml
```

Let's delete the existing pipeline

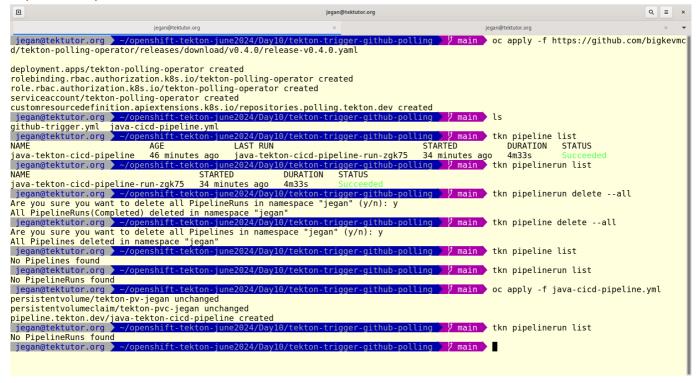
```
cd ~/openshift-tekton-june2024
git pull
cd Day10
tkn pipeline delete --all
tkn pipelinerun delete --all
```

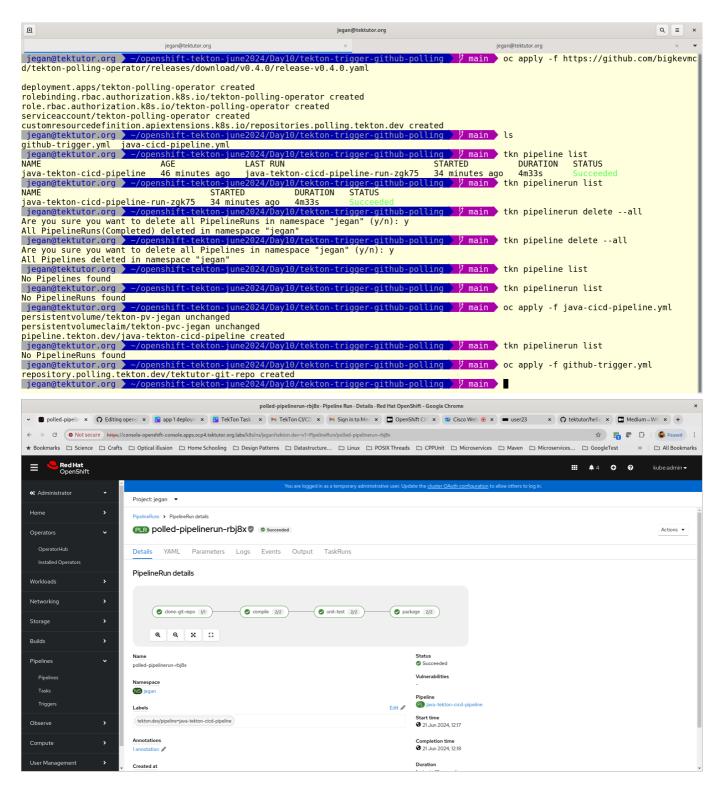
Let's create the pipeline and setup the github polling

```
cd ~/openshift-tekton-june2024
git pull
```

```
cd Day10
cd tekton-trigger-github-polling
oc apply -f java-cicd-pipeline.yml
oc apply -f github-trigger.yml
```

Expected output





Lab - TekTon Trigger (GitHub webhook similulation with curl)

```
cd ~/openshift-tekton-june2024
git pull
cd Day10/tekton-trigger-github-webhook
oc apply -f first-pipeline.yml
oc apply -f tekton-trigger.yml
```

Check if the event listener pod is running

```
oc get pod --field-selector=status.phase==Running
```

Find the service name

```
oc get el tektutor-trigger-listener -
o=jsonpath='{.status.configuration.generatedName}'
```

List the service now

```
oc get service $(oc get el tektutor-trigger-listener - o=jsonpath'{.status.configuration.generatedName}')
```

Load the service name into an environment variable

```
SVC_NAME=$(oc get el tektutor-trigger-listener -
o=jsonpath='{.status.configuration.generatedName}')
```

Let's create a route

```
oc create route edge ${SVC_NAME}-route --service=${SVC_NAME}
```

See if the route is created

```
oc get route ${SVC_NAME}-route
```

Let's us invoke the Trigger now (this is how github webhook will notifiy for Tekton Pipeline)

```
HOOK_URL=https://$(oc get route ${SVC_NAME}-route -
o=jsonpath='{.spec.host}')
curl --insecure --location --request POST ${HOOK_URL} --header 'Content-
Type: application/json' --data-raw '{"name": "run-my-app", "run-it": "yes-
please}'
```

Expected output

