Exercise 6

1. Describe pros and cons of rebasing vs merging a feature branch with the master branch. Give some hypothetical scenarios in which one mechanism makes more sense than the other. Why keep the feature branch up to date with the master branch during development?

Pros of rebasing:

Clean commit history, changes are placed on TOP of target branch

Pushes changes as a single commit, easier to timeline development stages

Helpful for tracking progress when commits come from multiple branches

Cons of rebasing:

More difficult to resolve conflicts

Very difficult to “reverse”

Conflicts must be resolved one at a time

Pros of merge:

Simple commit tracking

Easy to revert to a specific commit

Preserve commit history and timeline

Cons of merge:

Can be messy to track changes, especially from multiple branches

Resolve conflicts in one commit

Use of merge is typically best when developing something like a single feature or code update. You bring the changes into master one time, all at once (typically deleting the feature branch after successful testing)

Rebasing is very useful when working in a larger team with many feature branches (feature #1, feature #2, etc). This means you can pull in changes and use the newly rebased code as a platform for additional changes.

Typically, regularly pulling changes from master branch ensures you are working (and testing!) against the latest, fully tested code. Especially helpful in large teams with many different branches being developed and pulled into master. You can’t “over pull” changes – as a standard practice, I pull changes in throughout the day and particularly before committing new code changes to my development branches.

1. Make a new repository on your GitHub account "week6". Copy the contents of everything in directory Chapter08/sample1 and below into your week6 repository, and add them into your repository.

Configure a webhook such that when a pull request is created for this repository, a job in a pipeline is started. The pull request should trigger the job. This is the only circumstance that will trigger a job, do not allow any other GitHub events (push, create repository, etc.) to trigger the job as we wish to avoid sending too many webhooks.

* The **CodeCoverage test should only run on the master branch**. It should not run on any other branch (e.g., not on the feature branch).
* **All other tests should run in the feature branch**.
* The pipeline **should not run any steps on the "playground"** branch.

The multibranch pipeline may give you problems with "rate limiting". I suggest using a regular pipeline to avoid running into that. Submit

●Description of your experiment and any problems you ran into

●A copy of your pipeline.

●Proof that the webhook was sent in the Jenkins logs.

●Console output of your job for 3 cases

○ the master branch

○ feature branch

○ playground branch

**Response**:

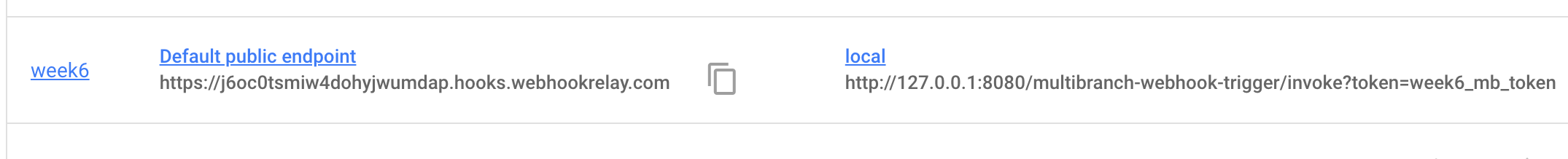
The goal of this exercise is to create a multibranch (MB) pipeline that responds to webhooks initiated by a pull request from GitHub. There were several spots of difficulty in getting this all working, but mostly due to working on a laptop and not a real server or cloud offering. I have detailed the steps taken to complete this process, as well as any challenges along the way, below.

After creating the new repo with contents of Chapter 8 in the ‘main’ branch, I also ensured that the following plugin was installed in Jenkins:

Graphical user interface, text

Description automatically generated

Following that, I created a bucket called “week6” in Webhook Relay:



With these two important items in place, I went ahead and created the remaining branches required by the exercise using the:

*git checkout -b playground*

*git checkout -b feature*

A screenshot of a computer

Description automatically generated with medium confidence

One final preparation step was to setup the webhook in GitHub as well, using the public endpoint from Webhook Relay:

Graphical user interface, text, application

Description automatically generated

Then it was on to creating the pipeline. To avoid rate limiting, I set a credential in Jenkins and referenced in the Branch Sources for the Multibranch Pipeline job. This is a two-step process, first, you need to create a personal access token under developer tools in GitHub then add it to Jenkins’s credential store:

Graphical user interface, text, application

Description automatically generated Graphical user interface, text, application

Description automatically generated

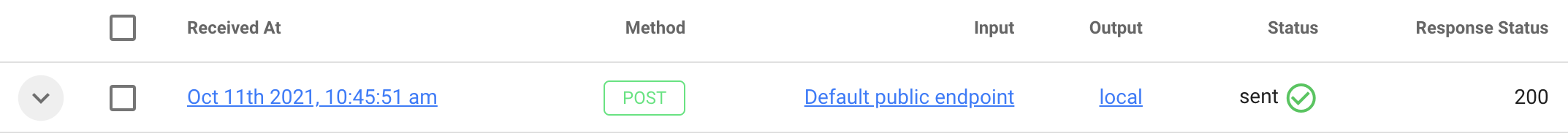
Then, initiate a new multibranch pipeline and scan the repositories for their first build. Once the scan was complete, all branches showed up in the status:

A picture containing table

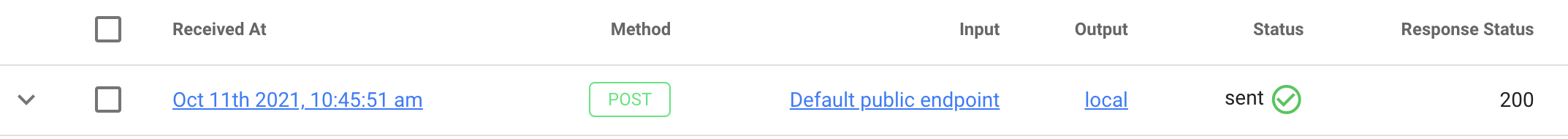
Description automatically generated

With that out of the way, the next action was to edit a branch and create a pull request. The pull requests hooks wo Webhook Relay via GitHub webhook, which then relays the request to Jenkins:

Webhook Relay input:



Webhook Relay output:



The output payload uses the Token defined in the multibranch pipeline webhook settings:

*http://127.0.0.1:8080/multibranch-webhook-trigger/invoke?token=week6\_mb\_token*

After which, the payload is received by Jenkins and builds automatically queue based on the changed branches. For example, editing ‘feature’ and then opening a pull request to ‘main’ causes both ‘feature’ and ‘main’ to rebuild using the edited changes.

A screenshot of a computer

Description automatically generated with medium confidence

Partial GitHub log for Webhook off the pull request:

Text

Description automatically generated

You can also observe the webhook being processed by the webhookrelayd container:

Text

Description automatically generated

As well as the Jenkins MB pipeline:

Graphical user interface, text, application

Description automatically generated

We can also observe from the Jenkins log, that MB pipeline has been triggered and is building pods to run the Gradle jobs:

Text

Description automatically generated

As well as the new pods started to support MB pipeline:

Text

Description automatically generated with medium confidence

Addendums:

Pull requests were made by editing ‘feature’ branch and pulling to ‘main’, then pulling ‘main’ into ‘playground’

The Jenkins pod processing was very resource intensive and was prone to misfiring triggers as well as momentary disconnects/communication failures. I doubled the resource limits on the Jenkins deployment, re-deployed and saw much improved performance.

System busy, can’t contact K8s:



System busy, job attempting to resume (eventually it does complete)

Text

Description automatically generated

Pod fails, K8s rebuilds it:



Out of memory. This happened when several pods were seen as failed, errored and held resources.

Text

Description automatically generated

1. Jenkinsfile – modified with env.BRANCH\_NAME to make it universal based on what branch is building. There is also logic in the scripted pipeline to determine what tests will run based on the exercise criteria.

podTemplate(containers: [

containerTemplate(

name: 'gradle',

image: 'gradle:6.3-jdk14',

command: 'sleep',

args: '30d'),

]) {

**node**(POD\_LABEL) {

stage('Run pipeline against a gradle project') {

git branch: env.BRANCH\_NAME, url:'https://github.com/harvash/cxa791-week\_6.git'

container('gradle') {

stage('Build a gradle project') {

**sh** '''echo test webhook changed for pull request

cd Chapter08/sample1

chmod +x gradlew '''

if (env.BRANCH\_NAME == 'main') {

**sh** '''cd Chapter08/sample1

./gradlew test'''

}

}

stage('Code coverage') {

if (env.BRANCH\_NAME == 'main') {

**sh** '''pwd

cd Chapter08/sample1

./gradlew jacocoTestCoverageVerification

./gradlew jacocoTestReport'''

publishHTML (

target: [

reportDir: 'Chapter08/sample1/build/reports/jacoco/test/html',

reportFiles: 'index.html',

reportName: 'JaCoCo Report'

]

)

}

}

stage('Checkstyle') {

if (env.BRANCH\_NAME == 'feature') {

try {

**sh** '''pwd

cd Chapter08/sample1

./gradlew checkstyleMain'''

} catch(all) {

**echo** "checkstyle fails"

}

publishHTML (

target: [

reportDir: 'Chapter08/sample1/build/reports/checkstyle',

reportFiles: 'main.html',

reportName: 'CheckStyle Report'

]

)

}

}

stage('Unit\_test') {

if (env.BRANCH\_NAME == 'feature') {

try {

**sh** '''pwd

cd Chapter08/sample1

./gradlew test'''

} catch(all) {

**echo** "Unit tests fail"

}

}

}

}

}

}

}

1. main console output (We see that only Code Coverage has run):

Branch indexing

23:29:20 Connecting to [https://api.github.com](https://api.github.com/) using harvash/\*\*\*\*\*\*

Obtained Chapter08/sample1/Jenkinsfile from e659b11b64c98a0b31b6f60b9b2ef742b652b869

Running in Durability level: MAX\_SURVIVABILITY

[Pipeline] Start of Pipeline

[Pipeline] podTemplate

[Pipeline] {

[Pipeline] node

Created Pod: kubernetes jenkins/week6-mb-main-2-7x071-p87g1-xrh9h

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Scheduled] Successfully assigned jenkins/week6-mb-main-2-7x071-p87g1-xrh9h to docker-desktop

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Pulled] Container image "gradle:6.3-jdk14" already present on machine

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Created] Created container gradle

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Started] Started container gradle

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Pulled] Container image "jenkins/inbound-agent:4.3-4" already present on machine

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Created] Created container jnlp

[Normal][jenkins/week6-mb-main-2-7x071-p87g1-xrh9h][Started] Started container jnlp

Still waiting to schedule task

‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Agent [week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h) is provisioned from template week6\_mb\_main\_2-7x071-p87g1

---

apiVersion: "v1"

kind: "Pod"

metadata:

annotations:

buildUrl: "<http://jenkins-service.jenkins.svc.cluster.local:8080/job/week6_mb/job/main/2/>"

runUrl: "job/week6\_mb/job/main/2/"

labels:

jenkins: "agent"

jenkins/label-digest: "19efb4a8af7cd253eb09757681375252978b7207"

jenkins/label: "week6\_mb\_main\_2-7x071"

name: "week6-mb-main-2-7x071-p87g1-xrh9h"

spec:

containers:

- args:

- "30d"

command:

- "sleep"

image: "gradle:6.3-jdk14"

imagePullPolicy: "IfNotPresent"

name: "gradle"

resources:

limits: {}

requests: {}

tty: false

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

- env:

- name: "JENKINS\_SECRET"

value: "\*\*\*\*\*\*\*\*"

- name: "JENKINS\_AGENT\_NAME"

value: "week6-mb-main-2-7x071-p87g1-xrh9h"

- name: "JENKINS\_NAME"

value: "week6-mb-main-2-7x071-p87g1-xrh9h"

- name: "JENKINS\_AGENT\_WORKDIR"

value: "/home/jenkins/agent"

- name: "JENKINS\_URL"

value: "<http://jenkins-service.jenkins.svc.cluster.local:8080/>"

image: "jenkins/inbound-agent:4.3-4"

name: "jnlp"

resources:

limits: {}

requests:

memory: "256Mi"

cpu: "100m"

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

nodeSelector:

kubernetes.io/os: "linux"

restartPolicy: "Never"

volumes:

- emptyDir:

medium: ""

name: "workspace-volume"

Running on [week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/) in /home/jenkins/agent/workspace/week6\_mb\_main

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Run pipeline against a gradle project)

[Pipeline] git

Selected Git installation does not exist. Using Default

The recommended git tool is: NONE

No credentials specified

Cloning the remote Git repository

Avoid second fetch

Checking out Revision e659b11b64c98a0b31b6f60b9b2ef742b652b869 (refs/remotes/origin/main)

Cloning repository <https://github.com/harvash/cxa791-week_6.git>

> git init /home/jenkins/agent/workspace/week6\_mb\_main # timeout=10

Fetching upstream changes from <https://github.com/harvash/cxa791-week_6.git>

> git --version # timeout=10

> git --version # 'git version 2.20.1'

> git fetch --tags --force --progress -- <https://github.com/harvash/cxa791-week_6.git> +refs/heads/\*:refs/remotes/origin/\* # timeout=10

> git config remote.origin.url <https://github.com/harvash/cxa791-week_6.git> # timeout=10

> git config --add remote.origin.fetch +refs/heads/\*:refs/remotes/origin/\* # timeout=10

> git rev-parse refs/remotes/origin/main^{commit} # timeout=10

> git config core.sparsecheckout # timeout=10

> git checkout -f e659b11b64c98a0b31b6f60b9b2ef742b652b869 # timeout=10

> git branch -a -v --no-abbrev # timeout=10

> git checkout -b main e659b11b64c98a0b31b6f60b9b2ef742b652b869 # timeout=10

Commit message: "Merge pull request #14 from harvash/feature"

> git rev-list --no-walk 0cb598e57efbfd34f36a8b7af5b3a55de35b2b8b # timeout=10

[Pipeline] container

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Build a gradle project)

[Pipeline] sh

+ echo test webhook changed for pull request

test webhook changed for pull request

+ cd Chapter08/sample1

+ chmod +x gradlew

[Pipeline] sh

+ cd Chapter08/sample1

+ ./gradlew test

Downloading <https://services.gradle.org/distributions/gradle-4.10.2-bin.zip>

..........................................................................

Welcome to Gradle 4.10.2!

Here are the highlights of this release:

- Incremental Java compilation by default

- Periodic Gradle caches cleanup

- Gradle Kotlin DSL 1.0-RC6

- Nested included builds

- SNAPSHOT plugin versions in the `plugins {}` block

For more details see <https://docs.gradle.org/4.10.2/release-notes.html>

Starting a Gradle Daemon (subsequent builds will be faster)

> Task :compileJava

> Task :processResources

> Task :classes

> Task :compileTestJava

Cannot contact week6-mb-main-2-7x071-p87g1-xrh9h: java.lang.InterruptedException

Resuming build at Mon Oct 11 23:41:54 EDT 2021 after Jenkins restart

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Waiting to resume part of week6\_mb » main #2: ‘[week6-mb-main-2-7x071-p87g1-xrh9h](http://localhost:32001/computer/week6-mb-main-2-7x071-p87g1-xrh9h/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_main’ on computer named ‘week6-mb-main-2-7x071-p87g1-xrh9h’

Ready to run at Mon Oct 11 23:42:25 EDT 2021

> Task :processTestResources

> Task :testClasses

> Task :test

BUILD SUCCESSFUL in 11m 26s

5 actionable tasks: 5 executed

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Code coverage)

[Pipeline] sh

+ pwd

/home/jenkins/agent/workspace/week6\_mb\_main

+ cd Chapter08/sample1

+ ./gradlew jacocoTestCoverageVerification

> Task :compileJava UP-TO-DATE

> Task :processResources UP-TO-DATE

> Task :classes UP-TO-DATE

> Task :jacocoTestCoverageVerification

BUILD SUCCESSFUL in 12s

3 actionable tasks: 1 executed, 2 up-to-date

+ ./gradlew jacocoTestReport

> Task :compileJava UP-TO-DATE

> Task :processResources UP-TO-DATE

> Task :classes UP-TO-DATE

> Task :jacocoTestReport

BUILD SUCCESSFUL in 16s

3 actionable tasks: 1 executed, 2 up-to-date

[Pipeline] publishHTML

[htmlpublisher] Archiving HTML reports...

[htmlpublisher] Archiving at PROJECT level /home/jenkins/agent/workspace/week6\_mb\_main/Chapter08/sample1/build/reports/jacoco/test/html to /var/jenkins\_home/jobs/week6\_mb/branches/main/htmlreports/JaCoCo\_20Report

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Checkstyle)

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Unit\_test)

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // container

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // node

[Pipeline] }

[Pipeline] // podTemplate

[Pipeline] End of Pipeline

GitHub has been notified of this commit’s build result

Finished: SUCCESS

1. Console output for feature. Only Code Coverage test DOESN’T run (main branch only):

Branch indexing

23:29:20 Connecting to [https://api.github.com](https://api.github.com/) using harvash/\*\*\*\*\*\*

Obtained Chapter08/sample1/Jenkinsfile from 041ba44a12eae8d4847fe3174b42b7d3cb2ed600

Running in Durability level: MAX\_SURVIVABILITY

[Pipeline] Start of Pipeline

[Pipeline] podTemplate

[Pipeline] {

[Pipeline] node

Created Pod: kubernetes jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Scheduled] Successfully assigned jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m to docker-desktop

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Pulled] Container image "gradle:6.3-jdk14" already present on machine

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Created] Created container gradle

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Started] Started container gradle

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Pulled] Container image "jenkins/inbound-agent:4.3-4" already present on machine

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Created] Created container jnlp

[Normal][jenkins/week6-mb-feature-1-qv5gw-jkb8v-wgs7m][Started] Started container jnlp

Still waiting to schedule task

‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Agent [week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m) is provisioned from template week6\_mb\_feature\_1-qv5gw-jkb8v

---

apiVersion: "v1"

kind: "Pod"

metadata:

annotations:

buildUrl: "<http://jenkins-service.jenkins.svc.cluster.local:8080/job/week6_mb/job/feature/1/>"

runUrl: "job/week6\_mb/job/feature/1/"

labels:

jenkins: "agent"

jenkins/label-digest: "54c9a5281330458c5729119aaf1da16c4156d526"

jenkins/label: "week6\_mb\_feature\_1-qv5gw"

name: "week6-mb-feature-1-qv5gw-jkb8v-wgs7m"

spec:

containers:

- args:

- "30d"

command:

- "sleep"

image: "gradle:6.3-jdk14"

imagePullPolicy: "IfNotPresent"

name: "gradle"

resources:

limits: {}

requests: {}

tty: false

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

- env:

- name: "JENKINS\_SECRET"

value: "\*\*\*\*\*\*\*\*"

- name: "JENKINS\_AGENT\_NAME"

value: "week6-mb-feature-1-qv5gw-jkb8v-wgs7m"

- name: "JENKINS\_NAME"

value: "week6-mb-feature-1-qv5gw-jkb8v-wgs7m"

- name: "JENKINS\_AGENT\_WORKDIR"

value: "/home/jenkins/agent"

- name: "JENKINS\_URL"

value: "<http://jenkins-service.jenkins.svc.cluster.local:8080/>"

image: "jenkins/inbound-agent:4.3-4"

name: "jnlp"

resources:

limits: {}

requests:

memory: "256Mi"

cpu: "100m"

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

nodeSelector:

kubernetes.io/os: "linux"

restartPolicy: "Never"

volumes:

- emptyDir:

medium: ""

name: "workspace-volume"

Running on [week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/) in /home/jenkins/agent/workspace/week6\_mb\_feature

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Run pipeline against a gradle project)

[Pipeline] git

Selected Git installation does not exist. Using Default

The recommended git tool is: NONE

No credentials specified

Cloning the remote Git repository

Avoid second fetch

Checking out Revision 041ba44a12eae8d4847fe3174b42b7d3cb2ed600 (refs/remotes/origin/feature)

Cloning repository <https://github.com/harvash/cxa791-week_6.git>

> git init /home/jenkins/agent/workspace/week6\_mb\_feature # timeout=10

Fetching upstream changes from <https://github.com/harvash/cxa791-week_6.git>

> git --version # timeout=10

> git --version # 'git version 2.20.1'

> git fetch --tags --force --progress -- <https://github.com/harvash/cxa791-week_6.git> +refs/heads/\*:refs/remotes/origin/\* # timeout=10

> git config remote.origin.url <https://github.com/harvash/cxa791-week_6.git> # timeout=10

> git config --add remote.origin.fetch +refs/heads/\*:refs/remotes/origin/\* # timeout=10

> git rev-parse refs/remotes/origin/feature^{commit} # timeout=10

> git config core.sparsecheckout # timeout=10

> git checkout -f 041ba44a12eae8d4847fe3174b42b7d3cb2ed600 # timeout=10

> git branch -a -v --no-abbrev # timeout=10

> git checkout -b feature 041ba44a12eae8d4847fe3174b42b7d3cb2ed600 # timeout=10

Commit message: "change jenkinsfile message"

First time build. Skipping changelog.

[Pipeline] container

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Build a gradle project)

[Pipeline] sh

+ echo test webhook changed for pull request

test webhook changed for pull request

+ cd Chapter08/sample1

+ chmod +x gradlew

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Code coverage)

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Checkstyle)

[Pipeline] sh

+ pwd

/home/jenkins/agent/workspace/week6\_mb\_feature

+ cd Chapter08/sample1

+ ./gradlew checkstyleMain

Downloading <https://services.gradle.org/distributions/gradle-4.10.2-bin.zip>

..........................................................................

Welcome to Gradle 4.10.2!

Here are the highlights of this release:

- Incremental Java compilation by default

- Periodic Gradle caches cleanup

- Gradle Kotlin DSL 1.0-RC6

- Nested included builds

- SNAPSHOT plugin versions in the `plugins {}` block

For more details see <https://docs.gradle.org/4.10.2/release-notes.html>

Starting a Gradle Daemon (subsequent builds will be faster)

> Task :compileJava

> Task :processResources

> Task :classes

> Task :checkstyleMain

Cannot contact week6-mb-feature-1-qv5gw-jkb8v-wgs7m: java.lang.InterruptedException

Resuming build at Mon Oct 11 23:41:55 EDT 2021 after Jenkins restart

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Waiting to resume part of week6\_mb » feature #1: ‘[week6-mb-feature-1-qv5gw-jkb8v-wgs7m](http://localhost:32001/computer/week6-mb-feature-1-qv5gw-jkb8v-wgs7m/)’ is offline

Still trying to load Looking for path named ‘/home/jenkins/agent/workspace/week6\_mb\_feature’ on computer named ‘week6-mb-feature-1-qv5gw-jkb8v-wgs7m’

Ready to run at Mon Oct 11 23:42:25 EDT 2021

BUILD SUCCESSFUL in 11m 16s

3 actionable tasks: 3 executed

[Pipeline] publishHTML

[htmlpublisher] Archiving HTML reports...

[htmlpublisher] Archiving at PROJECT level /home/jenkins/agent/workspace/week6\_mb\_feature/Chapter08/sample1/build/reports/checkstyle to /var/jenkins\_home/jobs/week6\_mb/branches/feature/htmlreports/CheckStyle\_20Report

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Unit\_test)

[Pipeline] sh

+ pwd

/home/jenkins/agent/workspace/week6\_mb\_feature

+ cd Chapter08/sample1

+ ./gradlew test

> Task :compileJava UP-TO-DATE

> Task :processResources UP-TO-DATE

> Task :classes UP-TO-DATE

> Task :compileTestJava

> Task :processTestResources

> Task :testClasses

> Task :test

BUILD SUCCESSFUL in 45s

5 actionable tasks: 3 executed, 2 up-to-date

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // container

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // node

[Pipeline] }

[Pipeline] // podTemplate

[Pipeline] End of Pipeline

GitHub has been notified of this commit’s build result

Finished: SUCCESS

1. Console output Playground, NO tests run:

Branch indexing

00:46:43 Connecting to [https://api.github.com](https://api.github.com/) using harvash/\*\*\*\*\*\*

Obtained Chapter08/sample1/Jenkinsfile from 7029ea8a855d529f07cace93c0309602b0e8b795

Running in Durability level: MAX\_SURVIVABILITY

[Pipeline] Start of Pipeline

[Pipeline] podTemplate

[Pipeline] {

[Pipeline] node

Created Pod: kubernetes jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Scheduled] Successfully assigned jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq to docker-desktop

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Pulled] Container image "gradle:6.3-jdk14" already present on machine

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Created] Created container gradle

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Started] Started container gradle

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Pulled] Container image "jenkins/inbound-agent:4.3-4" already present on machine

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Created] Created container jnlp

[Normal][jenkins/week6-mb-playground-12-wj1k6-sq16p-kbmqq][Started] Started container jnlp

Agent [week6-mb-playground-12-wj1k6-sq16p-kbmqq](http://localhost:32001/computer/week6-mb-playground-12-wj1k6-sq16p-kbmqq) is provisioned from template week6\_mb\_playground\_12-wj1k6-sq16p

---

apiVersion: "v1"

kind: "Pod"

metadata:

annotations:

buildUrl: "<http://jenkins-service.jenkins.svc.cluster.local:8080/job/week6_mb/job/playground/12/>"

runUrl: "job/week6\_mb/job/playground/12/"

labels:

jenkins: "agent"

jenkins/label-digest: "1982e49170b76195b6c5c1624701e6db87a2e638"

jenkins/label: "week6\_mb\_playground\_12-wj1k6"

name: "week6-mb-playground-12-wj1k6-sq16p-kbmqq"

spec:

containers:

- args:

- "30d"

command:

- "sleep"

image: "gradle:6.3-jdk14"

imagePullPolicy: "IfNotPresent"

name: "gradle"

resources:

limits: {}

requests: {}

tty: false

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

- env:

- name: "JENKINS\_SECRET"

value: "\*\*\*\*\*\*\*\*"

- name: "JENKINS\_AGENT\_NAME"

value: "week6-mb-playground-12-wj1k6-sq16p-kbmqq"

- name: "JENKINS\_NAME"

value: "week6-mb-playground-12-wj1k6-sq16p-kbmqq"

- name: "JENKINS\_AGENT\_WORKDIR"

value: "/home/jenkins/agent"

- name: "JENKINS\_URL"

value: "<http://jenkins-service.jenkins.svc.cluster.local:8080/>"

image: "jenkins/inbound-agent:4.3-4"

name: "jnlp"

resources:

limits: {}

requests:

memory: "256Mi"

cpu: "100m"

volumeMounts:

- mountPath: "/home/jenkins/agent"

name: "workspace-volume"

readOnly: false

nodeSelector:

kubernetes.io/os: "linux"

restartPolicy: "Never"

volumes:

- emptyDir:

medium: ""

name: "workspace-volume"

Running on [week6-mb-playground-12-wj1k6-sq16p-kbmqq](http://localhost:32001/computer/week6-mb-playground-12-wj1k6-sq16p-kbmqq/) in /home/jenkins/agent/workspace/week6\_mb\_playground

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Run pipeline against a gradle project)

[Pipeline] git

Selected Git installation does not exist. Using Default

The recommended git tool is: NONE

No credentials specified

Cloning the remote Git repository

Cloning repository <https://github.com/harvash/cxa791-week_6.git>

> git init /home/jenkins/agent/workspace/week6\_mb\_playground # timeout=10

Fetching upstream changes from <https://github.com/harvash/cxa791-week_6.git>

> git --version # timeout=10

> git --version # 'git version 2.20.1'

> git fetch --tags --force --progress -- <https://github.com/harvash/cxa791-week_6.git> +refs/heads/\*:refs/remotes/origin/\* # timeout=10

Avoid second fetch

Checking out Revision 7029ea8a855d529f07cace93c0309602b0e8b795 (refs/remotes/origin/playground)

> git config remote.origin.url <https://github.com/harvash/cxa791-week_6.git> # timeout=10

> git config --add remote.origin.fetch +refs/heads/\*:refs/remotes/origin/\* # timeout=10

> git rev-parse refs/remotes/origin/playground^{commit} # timeout=10

> git config core.sparsecheckout # timeout=10

> git checkout -f 7029ea8a855d529f07cace93c0309602b0e8b795 # timeout=10

> git branch -a -v --no-abbrev # timeout=10

> git checkout -b playground 7029ea8a855d529f07cace93c0309602b0e8b795 # timeout=10

Commit message: "Merge pull request #17 from harvash/main"

> git rev-list --no-walk 94bb618d06c3cff27bb5a7152064a8b6de493324 # timeout=10

[Pipeline] container

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Build a gradle project)

[Pipeline] sh

+ echo test webhook playground Pull request

test webhook playground Pull request

+ cd Chapter08/sample1

+ chmod +x gradlew

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Code coverage)

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Checkstyle)

[Pipeline] }

[Pipeline] // stage

[Pipeline] stage

[Pipeline] { (Unit\_test)

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // container

[Pipeline] }

[Pipeline] // stage

[Pipeline] }

[Pipeline] // node

[Pipeline] }

[Pipeline] // podTemplate

[Pipeline] End of Pipeline

GitHub has been notified of this commit’s build result

Finished: SUCCESS