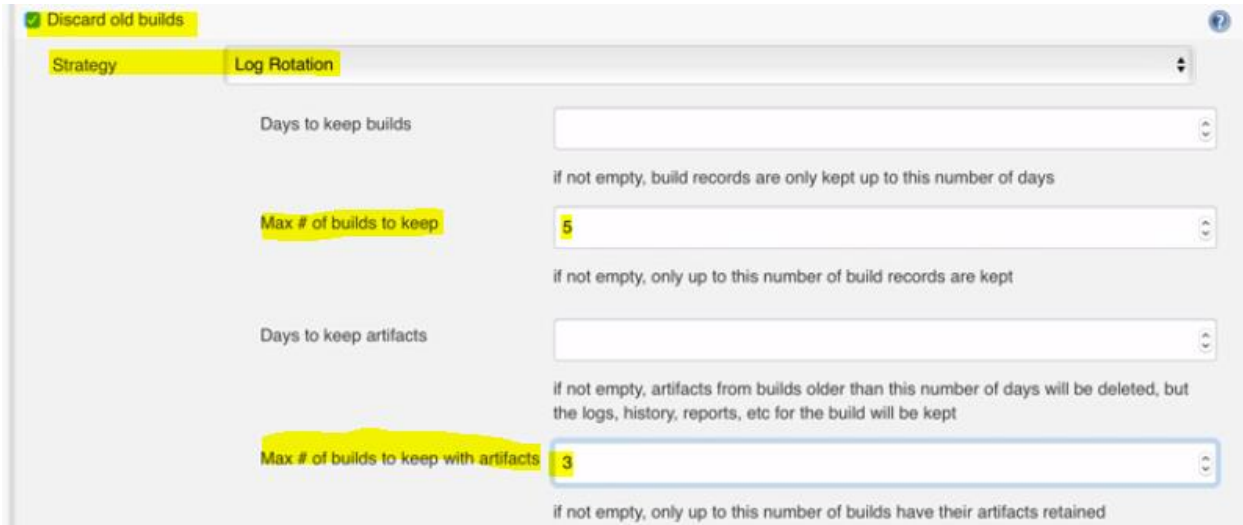


JENKINS >> devops >> General

STEP-1:



The screenshot shows the 'Discard old builds' configuration page in Jenkins. The 'Log Rotation' tab is selected. The 'Strategy' tab is also visible. The 'Max # of builds to keep' is set to 5. The 'Max # of builds to keep with artifacts' is set to 3. The 'Days to keep builds' and 'Days to keep artifacts' fields are empty. The page includes a 'Discard old builds' checkbox at the top left and a help icon at the top right.

☒ Discard old builds

Strategy Log Rotation

Days to keep builds

if not empty, build records are only kept up to this number of days

Max # of builds to keep 5

if not empty, only up to this number of build records are kept

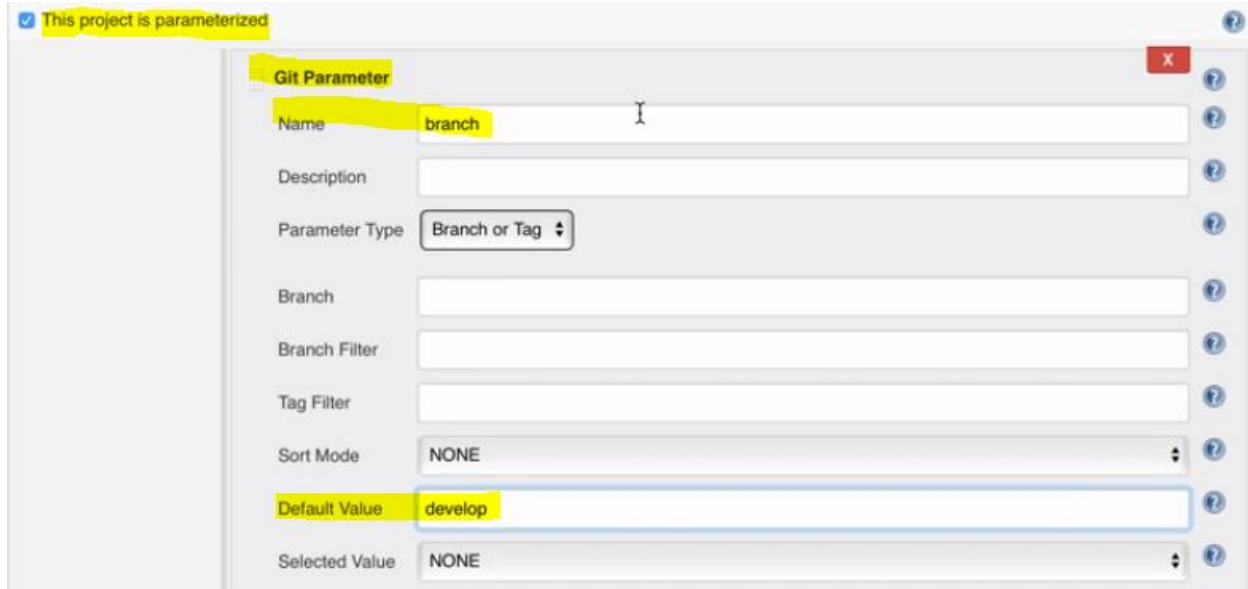
Days to keep artifacts

if not empty, artifacts from builds older than this number of days will be deleted, but the logs, history, reports, etc for the build will be kept

Max # of builds to keep with artifacts 3

if not empty, only up to this number of builds have their artifacts retained

STEP-2:



The screenshot shows the 'Git Parameter' configuration page in Jenkins. The 'This project is parameterized' checkbox is checked. The 'Name' field is set to 'branch'. The 'Parameter Type' is set to 'Branch or Tag'. The 'Default Value' is set to 'develop'. The 'Selected Value' is set to 'NONE'. The page includes a 'Git Parameter' title bar with a close button and a help icon.

☒ This project is parameterized

Git Parameter

Name branch

Description

Parameter Type Branch or Tag

Branch

Branch Filter

Tag Filter

Sort Mode NONE

Default Value develop

Selected Value NONE

STEP-3:

Git

Repositories

Repository URL

Credentials

Branches to build

Branch Specifier (blank for 'any')

Repository browser

STEP-4:

Branch Specifier (blank for 'any')

Repository browser

Additional Behaviours

☐ Clean before checkout

☐ Check out to specific local branch

Branch name

STEP-5:

Build Triggers

☒ Build whenever a SNAPSHOT dependency is built

☐ Schedule build when some upstream has no successful builds

☐ Trigger builds remotely (e.g., from scripts)

☐ Build after other projects are built

☐ Build periodically

☐ GitHub hook trigger for GITScm polling

☐ Poll SCM

STEP-6:

Build Environment

☒ Delete workspace before build starts

Advanced...

☐ Abort the build if it's stuck

☐ Add timestamps to the Console Output

☐ Inject environment variables to the build process

☐ Inject passwords to the build as environment variables

☐ Use secret text(s) or file(s)

STEP-7:

Pre Steps

Add pre-build step ▾

Build

Root POM

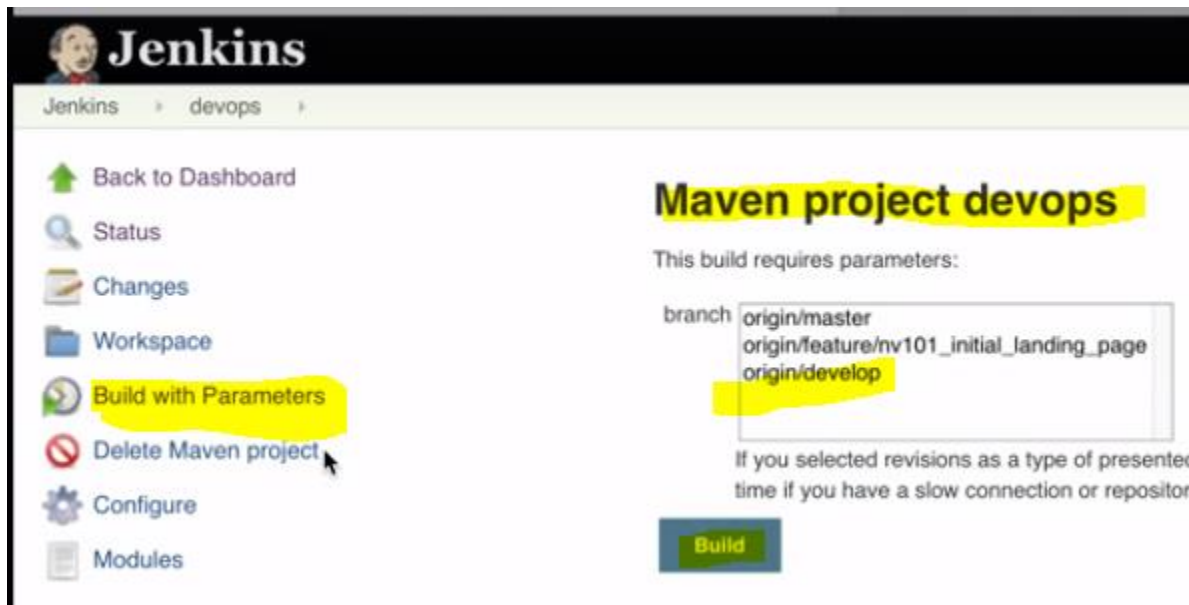
Goals and options

Advanced...

STEP-8:

Save Apply

STEP-9:



STEP-10:

JENKINS SNAPSHOT BUILDS

STEP-1:



STEP-2:

Post Steps

☐ Run only if build succeeds ☐ Run only if build succeeds or is unstable ☒ Run regardless of build result
Should the post-build steps run only for successful builds, etc.

Conditional steps (multiple) X

Run? **Strings match** ?

String 1 **\$(tag)**

String 2 **no** ?

Case insensitive ☐

STEP-3:

On evaluation failure **Fail the build** ?

Steps to run if condition is met

Execute shell X ?

Command **echo "Building snapshot from branch \${branch}"**

See [the list of available environment variables](#)

Add step to condition ▼

Advanced...

STEP-4:

Build

Root POM **pom.xml** ?

Goals and options **clean package** ?

Advanced...

STEP-5:

Steps to run if condition is met

Execute shell

Command `echo "Building snapshot from branch ${branch}"`

See [the list of available environment variables](#)

Advanced...

Invoke top-level Maven targets

Maven Version `maven`

Goals `deploy`

Advanced...

Add step to condition ▾

STEP-6:

Post-build Actions

Add post-build action ▾

Save

Apply

STEP-7:

Jenkins

Jenkins > devops >

- Back to Dashboard
- Status
- Changes
- Workspace
- Build with Parameters**
- Delete Maven project
- Configure
- Modules

Maven project devops

This build requires parameters:

branch:

If you selected revisions as a type of presentec time if you have a slow connection or repositor

tag:

Option to build a snapshot or release.

Build

Build History [trend](#)

find X

#1 Jul 29, 2017 8:10 AM

STEP-8:

```

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/1.0.0-SNAPSHOT/maven-metadata.xml (767 B at 51
kB/s)
Uploading: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/1.0.0-SNAPSHOT/maven-metadata.xml
Progress (1): 767 B

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/1.0.0-SNAPSHOT/maven-metadata.xml (767 B at 37
kB/s)
Uploading: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml
Progress (1): 313 B

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml (313 B at 13 kB/s)
Uploading: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml
Progress (1): 313 B

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml (313 B at 16 kB/s)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 13.870 s
[INFO] Finished at: 2017-07-29T08:18:36-05:00
[INFO] Final Memory: 33M/379M
[INFO] -----
Finished: SUCCESS

```

STEP-9:

JFrog Artifactory

Artifact Repository Browser

Tree Simple

- libs-release
 - libs-snapshot
 - libs-release-local
 - libs-snapshot-local
 - com/example/devops
 - 1.0.0-SNAPSHOT
 - devops-1.0.0-20170729.034735-1.pom
 - devops-1.0.0-20170729.034735-1.war
 - devops-1.0.0-20170729.044953-2.pom
 - devops-1.0.0-20170729.044953-2.war
 - devops-1.0.0-20170729.131835-3.pom
 - devops-1.0.0-20170729.131835-3.war
 - maven-metadata.xml
 - maven-metadata.xml

libs-release

General

Info

Name: libs-release

Package Type: Maven

Repository Path: libs-release/

Repository Layout: maven-2-default

Included Repositories

libs-release-local jcenter

STEP-10:

Index of libs-snapshot-local/com/example/devops/1.0.0-SNAPSHOT

Name	Last modified	Size
...		
devops-1.0.0-20170729.034735-1.pom	28-Jul-2017 22:47	2.70 KB
devops-1.0.0-20170729.034735-1.pom.md5	28-Jul-2017 22:47	32 bytes
devops-1.0.0-20170729.034735-1.pom.sha1	28-Jul-2017 22:47	40 bytes
devops-1.0.0-20170729.034735-1.war	28-Jul-2017 22:47	20.28 MB
devops-1.0.0-20170729.034735-1.war.md5	28-Jul-2017 22:47	32 bytes
devops-1.0.0-20170729.034735-1.war.sha1	28-Jul-2017 22:47	40 bytes
devops-1.0.0-20170729.044953-2.pom	28-Jul-2017 23:49	2.70 KB
devops-1.0.0-20170729.044953-2.pom.md5	28-Jul-2017 23:49	32 bytes
devops-1.0.0-20170729.044953-2.pom.sha1	28-Jul-2017 23:49	40 bytes
devops-1.0.0-20170729.044953-2.war	28-Jul-2017 23:49	20.28 MB
devops-1.0.0-20170729.044953-2.war.md5	28-Jul-2017 23:49	32 bytes
devops-1.0.0-20170729.044953-2.war.sha1	28-Jul-2017 23:49	40 bytes
devops-1.0.0-20170729.131835-3.pom	29-Jul-2017 08:18	2.70 KB
devops-1.0.0-20170729.131835-3.pom.md5	29-Jul-2017 08:18	32 bytes
devops-1.0.0-20170729.131835-3.pom.sha1	29-Jul-2017 08:18	40 bytes
devops-1.0.0-20170729.131835-3.war	29-Jul-2017 08:18	20.28 MB
devops-1.0.0-20170729.131835-3.war.md5	29-Jul-2017 08:18	32 bytes
devops-1.0.0-20170729.131835-3.war.sha1	29-Jul-2017 08:18	40 bytes
maven-metadata.xml	29-Jul-2017 08:18	767 bytes
maven-metadata.xml.md5	29-Jul-2017 08:18	32 bytes
maven-metadata.xml.sha1	29-Jul-2017 08:18	40 bytes

Artifactory/5.4.5 Server at localhost Port 8081

Jenkins Tomcat Deploy Plugin:

STEP-1:

The screenshot shows the Jenkins web interface for a project named 'devops'. The top navigation bar includes 'Jenkins' and 'devops'. The left sidebar contains links to 'Back to Dashboard', 'Status', 'Changes', 'Workspace', 'Build with Parameters', 'Delete Maven project', 'Configure' (highlighted), and 'Modules'. The main content area is titled 'Maven project devops' and features several sections: 'Workspace', 'Recent Changes', 'Latest Test Result (no failures)' (two instances), and 'Permalinks'. The 'Build History' section is visible on the left, showing a table of builds with columns for build number, status, and time. The 'Permalinks' section lists four links related to the last build (#2).

Jenkins

Jenkins > devops >

[Back to Dashboard](#)

[Status](#)

[Changes](#)

[Workspace](#)

[Build with Parameters](#)

[Delete Maven project](#)

[Configure](#)

[Modules](#)

Build History [trend](#)

find x

Build Number	Time
#2	Jul 29, 2017 8:17 AM
#1	Jul 29, 2017 8:10 AM

[RSS for all](#) [RSS for failures](#)

Maven project devops

[Workspace](#)

[Recent Changes](#)

[Latest Test Result](#) (no failures)

[Latest Test Result](#) (no failures)

Permalinks

- [Last build \(#2\), 6 min 16 sec ago](#)
- [Last stable build \(#2\), 6 min 16 sec ago](#)
- [Last successful build \(#2\), 6 min 16 sec ago](#)
- [Last completed build \(#2\), 6 min 16 sec ago](#)

STEP-2:

Post-build Actions

Deploy war/ear to a container

WAR/EAR files

War/ear files to deploy. Relative to the workspace root. You can also specify Ant-style GLOBs, like `***/*.war` (from [Deploy to container Plugin](#))

Context path

Containers

Tomcat 7.x

Manager user name

Manager password

Tomcat URL

Add Container ▾

Deploy on failure ☐

STEP-3:

A screenshot of the bottom of the configuration window. It shows two buttons: a dark blue 'Save' button and a light blue 'Apply' button. A mouse cursor is pointing at the 'Apply' button.

STEP-4:

The image shows the Jenkins web interface for a project named 'devops'. The left sidebar contains navigation links: 'Back to Dashboard', 'Status', 'Changes', 'Workspace', 'Build with Parameters' (highlighted in yellow), 'Delete Maven project', 'Configure', and 'Modules'. The main content area is titled 'Maven project devops' (highlighted in yellow). Below the title, it states 'This build requires parameters:'. There are two parameter sections: 'branch' with a dropdown menu showing 'origin/master', 'origin/feature/nv101_initial_landing_page', and 'origin/develop' (highlighted in yellow); and 'tag' with a dropdown menu showing 'no' and a blue arrow icon. Below the 'tag' dropdown, it says 'Option to build a snapshot or release.' At the bottom of the parameter section is a green 'Build' button with a mouse cursor hovering over it. On the left, there is a 'Build History' section with a search bar and a table showing two builds: '#2' from 'Jul 29, 2017 8:17 AM' and '#1' from 'Jul 29, 2017 8:10 AM'.

STEP-5:

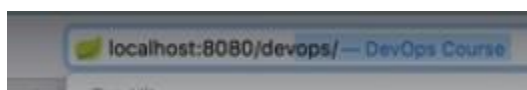
```

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml (313 B at 12 kB/s)
Uploading: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml
Progress (1): 313 B

Uploaded: http://localhost:8081/artifactory/libs-snapshot-local/com/example/devops/maven-metadata.xml (313 B at 15 kB/s)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 13.596 s
[INFO] Finished at: 2017-07-29T08:28:10-05:00
[INFO] Final Memory: 33M/380M
[INFO] -----
Deploying /Users/Shared/Jenkins/Home/workspace/devops/target/devops-1.0.0-SNAPSHOT.war to container Tomcat 7.x Remote
Redeploying [/Users/Shared/Jenkins/Home/workspace/devops/target/devops-1.0.0-SNAPSHOT.war]
Undeploying [/Users/Shared/Jenkins/Home/workspace/devops/target/devops-1.0.0-SNAPSHOT.war]
Deploying [/Users/Shared/Jenkins/Home/workspace/devops/target/devops-1.0.0-SNAPSHOT.war]
Finished: SUCCESS

```

STEP-6:



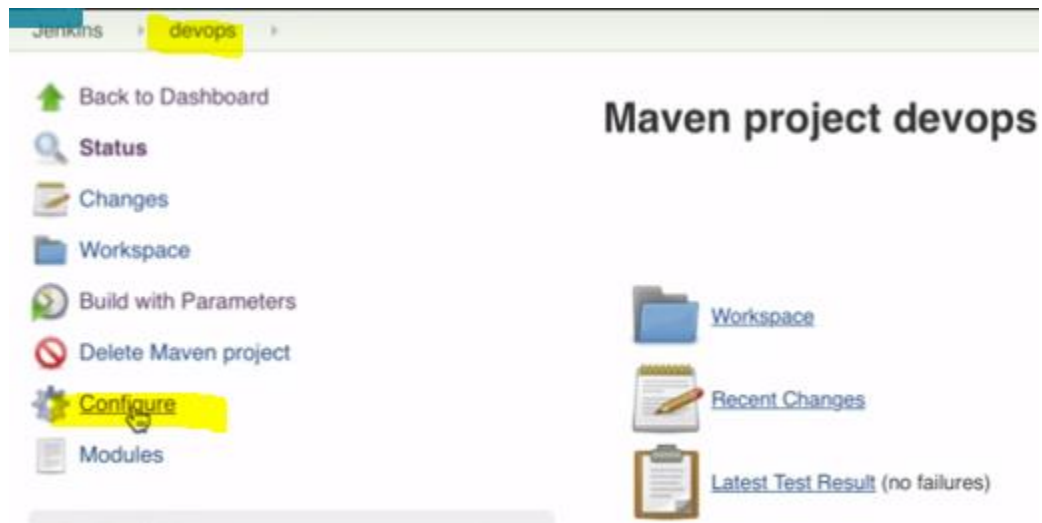
STEP-7:

Welcome to the DevOps Course

Course Name:DevOps

Jenkins Tomcat Deploy Script:

STEP-1:



STEP-2:

Description ?

[Plain text] [Preview](#)

Choice Parameter X ?

Name ?

Choices
 ?

Description ?

[Plain text] [Preview](#)

STEP-3:

☒ Inject passwords to the build as environment variables

Global passwords ☐

Job passwords

Name X ?

Password ?

Name X ?

Password ?

Passwords list

STEP-4:

Pre Steps

Add pre-build step ▾

Build

Root POM ?

Goals and options ?

Advanced...

STEP-5:

Post Steps

☐ Run only if build succeeds ☐ Run only if build succeeds or is unstable ☒ Run regardless of build result

Should the post-build steps run only for successful builds, etc.

Conditional steps (multiple) X

Run? ?

String 1

String 2

Case insensitive ☐

Advanced...

Steps to run if condition is met

Execute shell X ?

Command

STEP-6:

Invoke top-level Maven targets X ?

Maven Version

Goals

Advanced...

Add step to condition ▾

STEP-7:

Conditional steps (multiple)

Run? **Strings match**

String 1 **\$(tag)**

String 2 **yes**

Case insensitive ☐

Steps to run if condition is met

Add step to condition ▾

Advanced...

STEP-8:

Steps to run if condition is met

Execute shell

Command **echo "Building tag from branch \${branch}"**

See [the list of available environment variables](#)

Advanced...

Invoke top-level Maven targets

Maven Version **maven**

Goals **release:clean release:prepare release:perform**

Advanced...

STEP-9:

Conditional steps (multiple)

Run? **Strings match**

String 1 **\$(deploy)**

String 2 **yes**

Case insensitive ☐

STEP-10:

```
TC Deploy:
curl -u ${tcuser}:${tcpass} -T target/**/*.war "http://localhost:8080/manager/text/deploy?path=/devops&update=true"
```

Steps to run if condition is met

Execute shell

Command `curl -u ${tcuser}:${tcpass} -T target/**/*.war "http://localhost:8080/manager/text/d`

See [the list of available environment variables](#)

Advanced...

Add step to condition ▼

STEP-11: Remove Post-build Actions

Post-build Actions

Deploy war/ear to a container

WAR/EAR files ****/*.war**

Context path **devops**

Containers

Tomcat 7.x

Manager user name **jenkins**

Manager password *********

Tomcat URL **http://localhost:8080**

Add Container ▾

Deploy on failure ☐

X

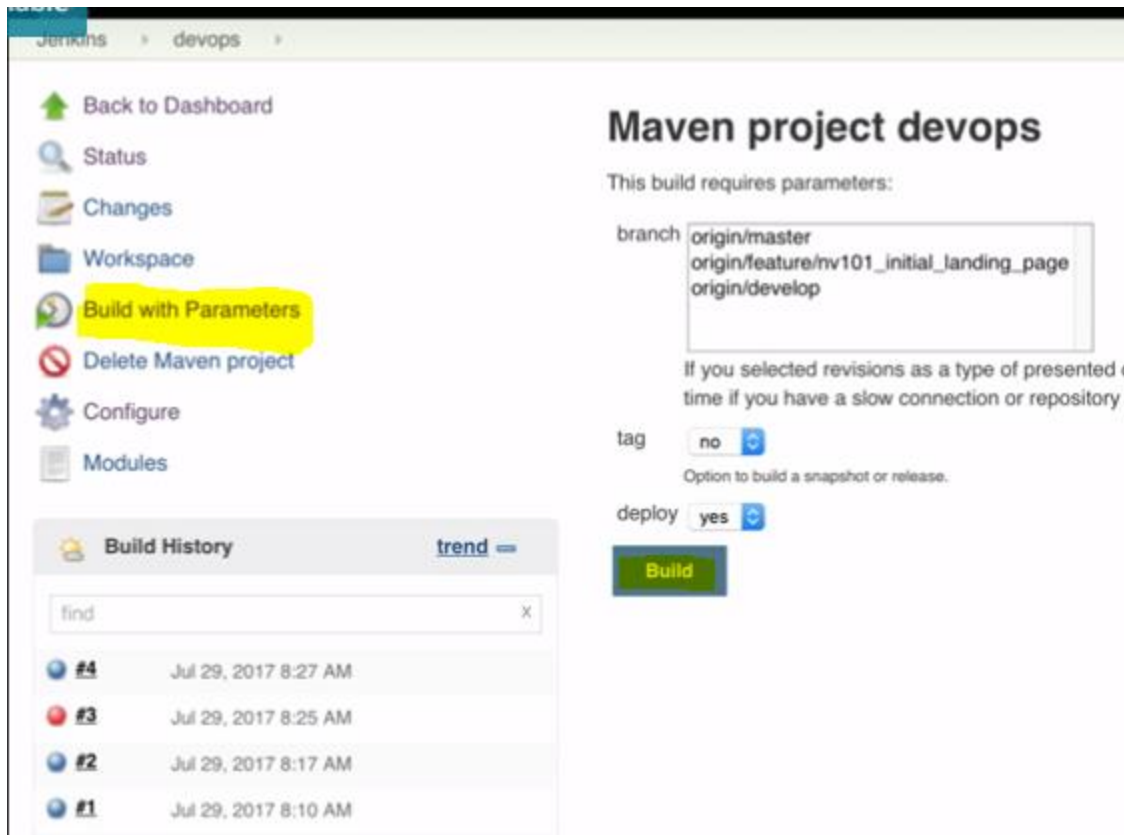
Delete

STEP-12:

Save

Apply

STEP-13:



GitFlow Feature Release:

STEP-1:

1. Start a Release Flow and Update Version on develop
2. Tag the Code for Release
3. Release Code to QA from Tag
4. Release Code to PRD from Artifactory
5. Finish Current Release

STEP-1:

```

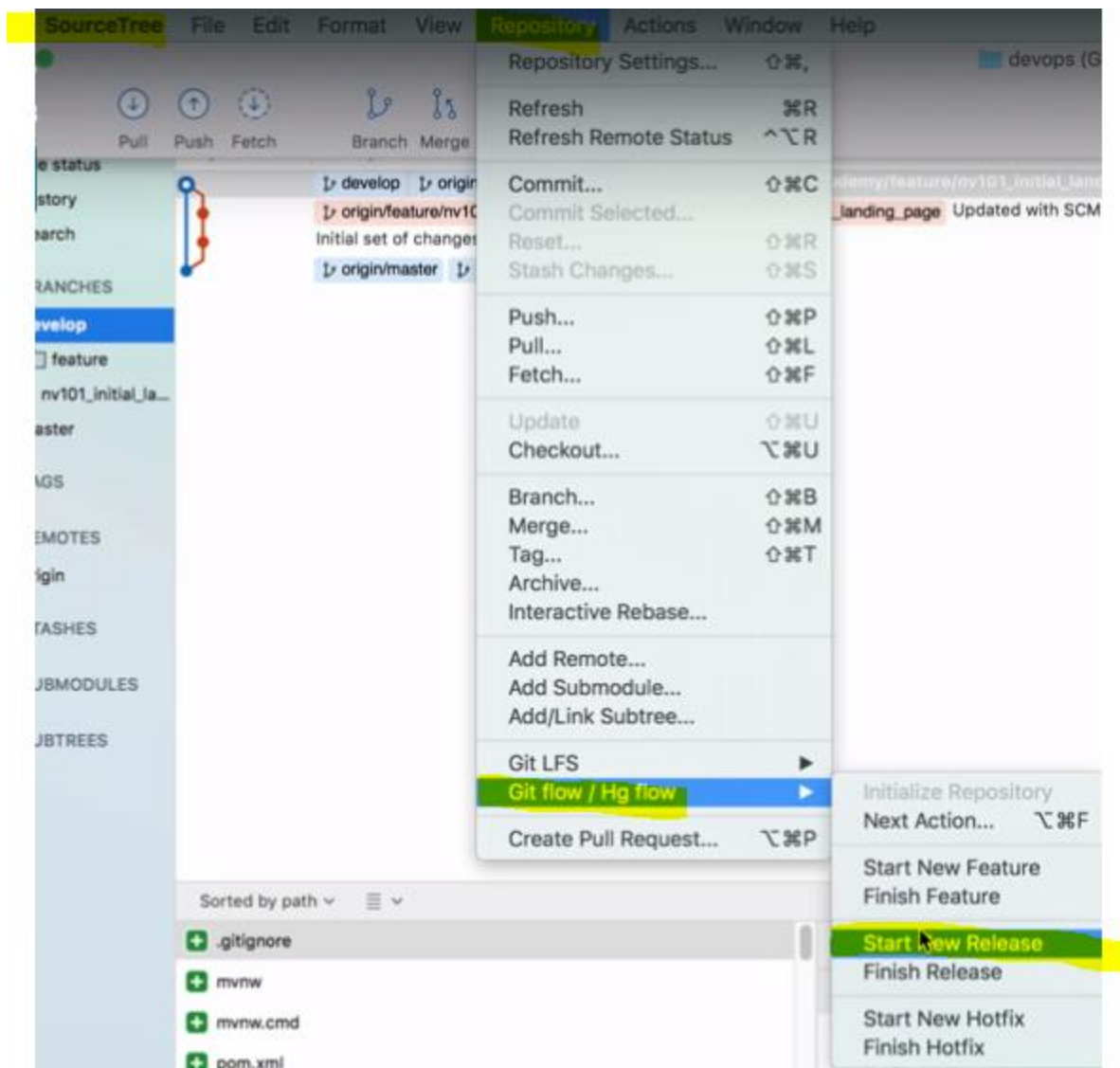
jenkins@ip-172-31-25-236:~/devops$ git add .
jenkins@ip-172-31-25-236:~/devops$ git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        modified:   target/devops-1.6.2-SNAPSHOT.war
        modified:   target/devops-1.6.2-SNAPSHOT.war.original
        modified:   target/jacoco.exec
        modified:   target/maven-archiver/pom.properties
        modified:   target/maven-status/maven-compiler-plugin/compile/default-compile/inputFiles.lst
        modified:   target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/inputFiles.lst
        modified:   target/site/jacoco/jacoco-sessions.html
        modified:   target/site/jacoco/jacoco.xml
        modified:   target/surefire-reports/TEST-com.example.devops.DevopsApplicationTests.xml
        modified:   target/surefire-reports/TEST-com.example.devops.web.WelcomeControllerTest.xml
        modified:   target/surefire-reports/com.example.devops.DevopsApplicationTests.txt
        modified:   target/surefire-reports/com.example.devops.web.WelcomeControllerTest.txt
        deleted:    target/surefire/surefire3116800960029938535tmp
        deleted:    target/surefire/surefire_05017527641826983714tmp
        deleted:    target/surefire/surefirebooter5865134362787708702.jar

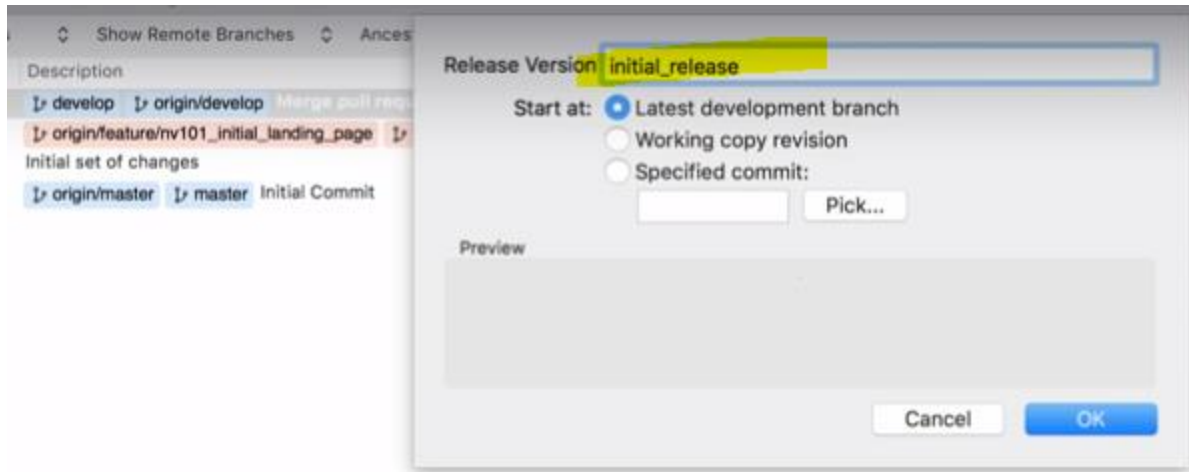
jenkins@ip-172-31-25-236:~/devops$ git commit -m "JenkinUserPush"
[master f3ff956] JenkinUserPush
 15 files changed, 56 insertions(+), 144 deletions(-)
 rewrite target/site/jacoco/jacoco-sessions.html (87%)
 rewrite target/site/jacoco/jacoco.xml (97%)
 delete mode 100644 target/surefire/surefire3116800960029938535tmp
 delete mode 100644 target/surefire/surefire_05017527641826983714tmp
 delete mode 100644 target/surefire/surefirebooter5865134362787708702.jar
jenkins@ip-172-31-25-236:~/devops$ git push -u origin master
Username for 'https://github.com': keshav
jenkins@ip-172-31-25-236:~/devops$ git push -u origin master
Username for 'https://github.com': keshav.kummari@gmail.com
Password for 'https://keshav.kummari@gmail.com@github.com':
Counting objects: 25, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (20/20), done.
Writing objects: 100% (25/25), 15.94 KiB | 0 bytes/s, done.
Total 25 (delta 14), reused 0 (delta 0)
remote: Resolving deltas: 100% (14/14), completed with 12 local objects.
To https://github.com/keshavkummari/devops.git
 81ffc84..f3ff956  master -> master
Branch master set up to track remote branch master from origin.
jenkins@ip-172-31-25-236:~/devops$

```

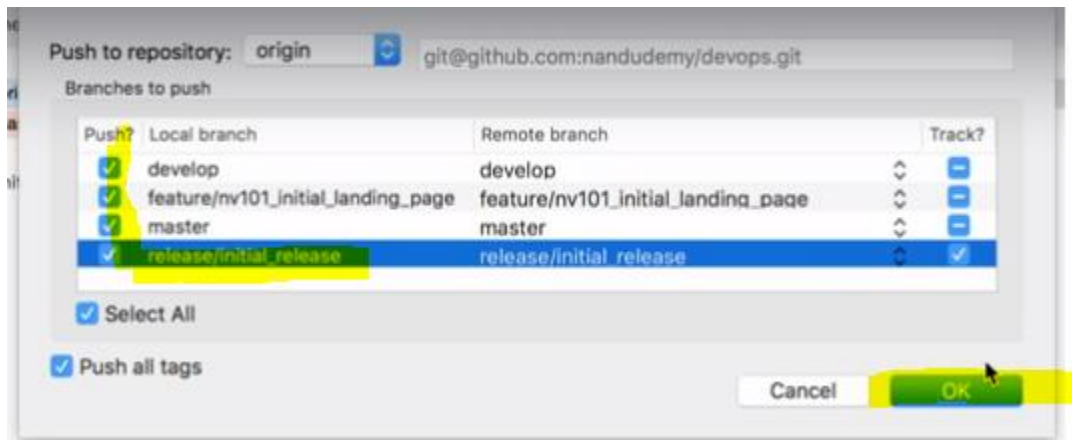
STEP-2:



STEP-3:



STEP-4:



STEP-5:

keshavkumari / devops

Unwatch 1 ★ Star 0

Code Issues 0 Pull requests 1 Projects 0 Wiki Insights Settings

Java Build

Add topics

8 commits 3 branches 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download

Latest commit 81ffc84 8 hours ago

File	Commit	Time
src	error	4 da
target	changes	4 da
JenkinsFile	changes	4 da
README.md	Update README.md	8 hou
mvnw	firstcommit	4 da
mvnw.cmd	firstcommit	4 da
pom.xml	changes	4 da

README.md

STEP-6: Before Going for release do the required changes in POM.xml file for Build version:

Package Explorer

devops [boot] [devtools] [devops develop]

- src/main/java
- src/main/resources
- src/test/java
- JRE System Library [JavaSE-1.8]
- Maven Dependencies
- src
- target
- mvnw
- mvnw.cmd
- pom.xml
- README.md

devops/pom.xml

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
4   <modelVersion>4.0.0</modelVersion>
5
6   <groupId>com.example</groupId>
7   <artifactId>devops</artifactId>
8   <version>1.0-SNAPSHOT</version>
9   <packaging>war</packaging>
10
11   <name>devops</name>
12   <description>DevOps Demo Project</description>
13
14   <parent>
15     <groupId>org.springframework.boot</groupId>
16     <artifactId>spring-boot-starter-parent</artifactId>
17     <version>1.5.6.RELEASE</version>
18     <relativePath> /> <!-- lookup parent from repository -->
19   </parent>
20
21   <properties>
22     <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
23     <project.reporting.outputEncoding>UTF-8</project.reporting.outputEncoding>
24     <java.version>1.8</java.version>
25   </properties>
26
27   <distributionManagement>
28     <repository>
29       <id>release</id>
30       <name>releases</name>
31       <url>http://localhost:8081/artifactory/libs-release-local</url>
32     </repository>
33     <snapshotRepository>
34       <id>snapshot</id>
35       <name>snapshots</name>

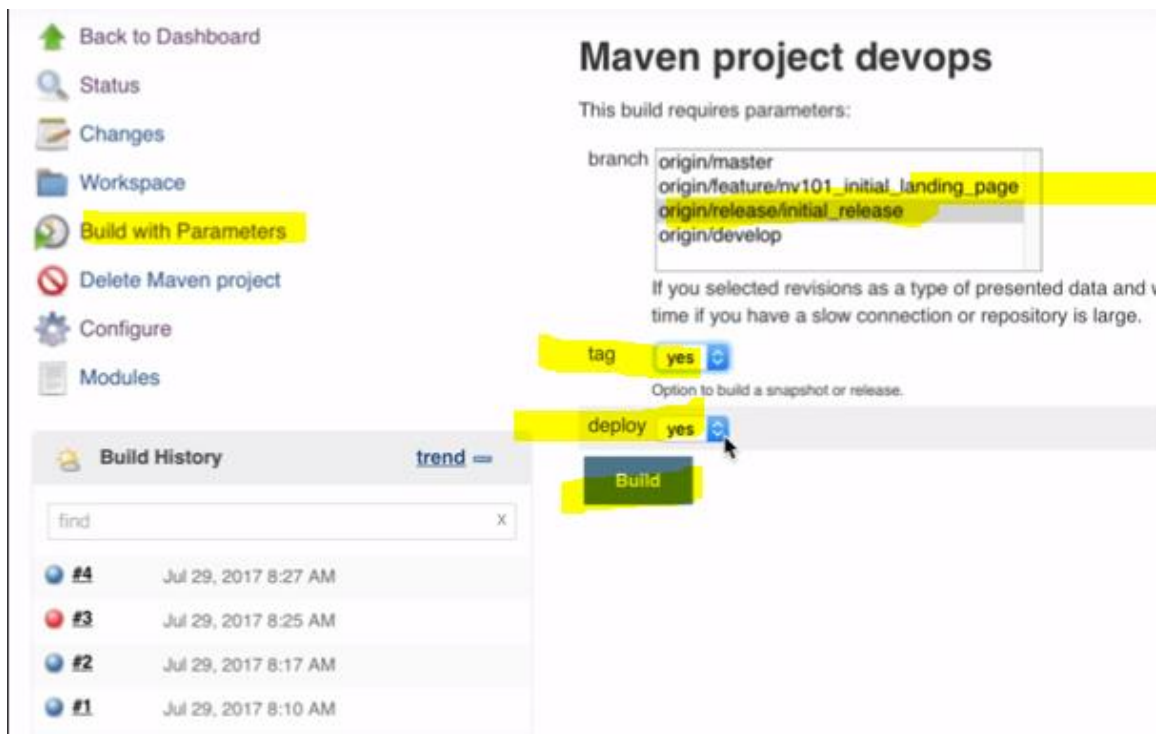
```

Overview | Dependencies | Dependency Hierarchy | Effective POM | pom.xml

Console | Progress | Problems | Servers | Boot Dashboard

No consoles to display at this time.

STEP-7:



Back to Dashboard

Status

Changes

Workspace

Build with Parameters

Delete Maven project

Configure

Modules

Maven project devops

This build requires parameters:

branch

- origin/master
- origin/feature/nv101_initial_landing_page
- origin/release/initial_release
- origin/develop

If you selected revisions as a type of presented data and v time if you have a slow connection or repository is large.

tag **yes**

Option to build a snapshot or release.

deploy **yes**

Build

Build History

trend

find X

- #4 Jul 29, 2017 8:27 AM
- #3 Jul 29, 2017 8:25 AM
- #2 Jul 29, 2017 8:17 AM
- #1 Jul 29, 2017 8:10 AM

STEP-8:



Jenkins

Jenkins » devops » #5

Back to Project

Status

Changes

Console Output

View as plain text

Edit Build Information

Console Output

```
Started by user [*****]admin
[EnvInject] - Loading node environment variables.
Building in workspace /Users/Shared/Jenkins/Home/workspace/devops
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Done
Cloning the remote Git repository
```

STEP-9:


```

[INFO] Progress (1): 324 B
[INFO]
[INFO] Downloaded: http://localhost:8081/artifactory/libs-release-local/com/example/devops/maven-metadata.xml (324 B at 13 kB/s)
[INFO] Uploading: http://localhost:8081/artifactory/libs-release-local/com/example/devops/maven-metadata.xml
[INFO] Progress (1): 324 B
[INFO]
[INFO] Uploaded: http://localhost:8081/artifactory/libs-release-local/com/example/devops/maven-metadata.xml (324 B at 14 kB/s)
[INFO] [INFO] -----
[INFO] [INFO] BUILD SUCCESS
[INFO] [INFO] -----
[INFO] [INFO] Total time: 19.016 s
[INFO] [INFO] Finished at: 2017-07-29T11:08:03:05:00
[INFO] [INFO] Final Memory: 41M/467M
[INFO] [INFO] -----
[INFO] Cleaning up after release...
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 55.326 s
[INFO] Finished at: 2017-07-29T11:08:04:05:00
[INFO] Final Memory: 15M/243M
[INFO] -----
Strings match run condition: string 1=[yes], string 2=[yes]
Run condition [Strings match] enabling perform for step [BuilderChain]
[devops] $ /bin/sh -xe /Users/Shared/Jenkins/tmp/[*****]6517015769855998377.sh
+ curl -u [*****]:[*****] -T target/devops-1.0.0.war 'http://localhost:8080/manager/text/deploy?path=/devops&update=true'
% Total    % Received % Xferd  Average Speed   Time    Time     Current
                                 Dload  Upload   Total   Spent    Left     Speed
  0     0    0     0    0     0      0      0      0      0      0      0      0
100 20.2M    0     0 100 20.2M    0 19.9M    0:00:01 0:00:01      0      0 19.9M
100 20.2M    0     0 100 20.2M    0 10.0M    0:00:02 0:00:02      0      0 10.0M
100 20.2M    0     0 100 20.2M    0 6882k    0:00:03 0:00:03      0      0 6884k
100 20.2M    0     0 100 20.2M    0 5168k    0:00:04 0:00:04      0      0 5169k
100 20.2M    0     0 100 20.2M    0 4138k    0:00:05 0:00:05      0      0 4139k
100 20.2M    0     0 100 20.2M    0 3450k    0:00:06 0:00:06      0      0 3450k
100 20.2M    0  52 100 20.2M    7 3186k    0:00:06 0:00:06      0      0 3186k
100 20.2M    0  52 100 20.2M    7 3186k    0:00:06 0:00:06      0      0 3186k
OK - Deployed application at context path [/devops]
Finished: SUCCESS

```

STEP-10:

```

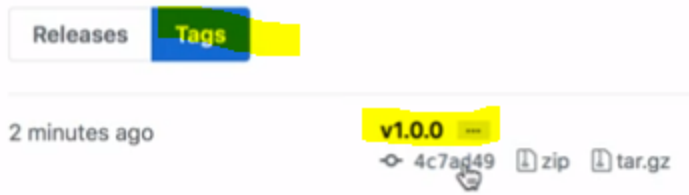
92 lines (81 sloc) 2.7 KB
Raw Blame History

1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="ht
3     <modelVersion>4.0.0</modelVersion>
4
5     <groupId>com.example</groupId>
6     <artifactId>devops</artifactId>
7     <version>1.0.1-SNAPSHOT</version>
8     <packaging>war</packaging>
9
10    <name>devops</name>
11    <description>DevOps Demo Project</description>
12

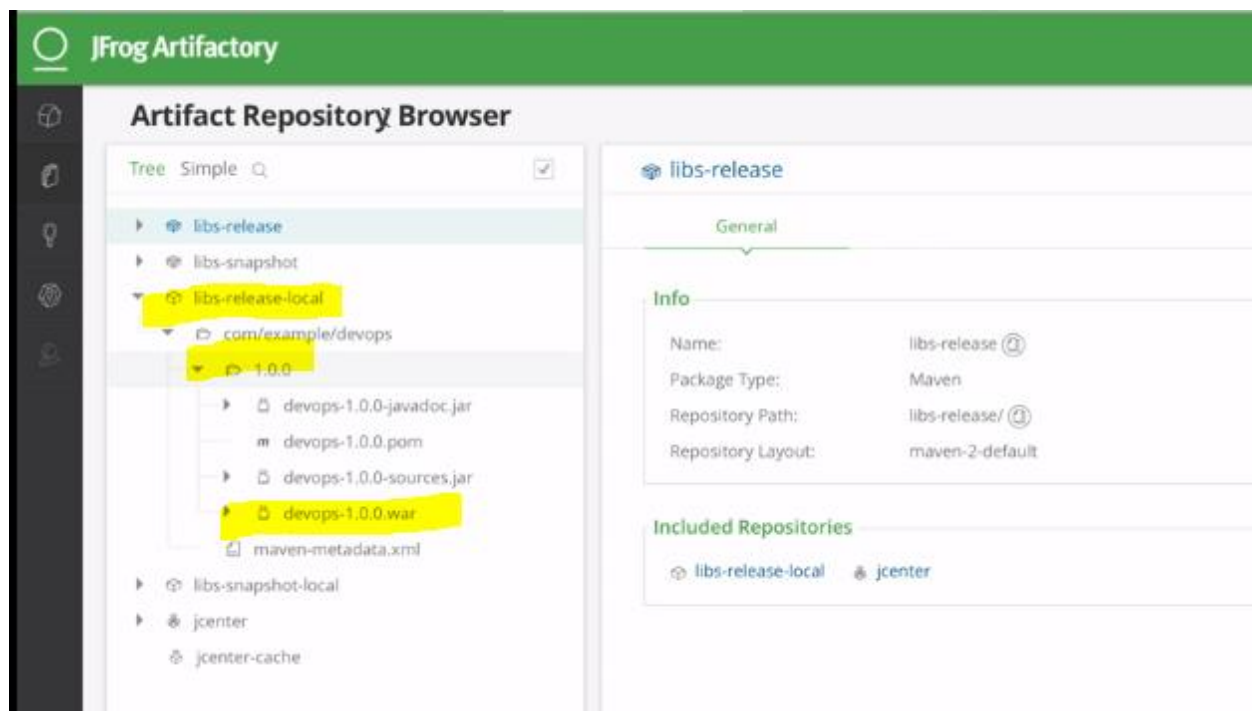
```

STEP-11:





STEP-12:



STEP-13:

Index of **libs-release-local/com/example/devops/1.0.0**

Name	Last modified	Size
./		
devops-1.0.0-javadoc.jar	29-Jul-2017 11:08	39.26 KB
devops-1.0.0-javadoc.jar.md5	29-Jul-2017 11:08	32 bytes
devops-1.0.0-javadoc.jar.sha1	29-Jul-2017 11:08	40 bytes
devops-1.0.0-sources.jar	29-Jul-2017 11:08	3.52 KB
devops-1.0.0-sources.jar.md5	29-Jul-2017 11:08	32 bytes
devops-1.0.0-sources.jar.sha1	29-Jul-2017 11:08	40 bytes
devops-1.0.0.pom	29-Jul-2017 11:08	2.70 KB
devops-1.0.0.pom.md5	29-Jul-2017 11:08	32 bytes
devops-1.0.0.pom.sha1	29-Jul-2017 11:08	40 bytes
devops-1.0.0.war	29-Jul-2017 11:08	20.28 KB
devops-1.0.0.war.md5	29-Jul-2017 11:08	32 bytes
devops-1.0.0.war.sha1	29-Jul-2017 11:08	40 bytes

Artifactory/5.4.5 Server at localhost Port 8081

Release the Code to QA from Tag:

STEP-1:

```

root@ip-172-31-25-236:/opt# pwd
/opt
root@ip-172-31-25-236:/opt# ls -lrt
total 691924
-rw-r--r-- 1 root root 9584807 Jun 20 20:26 apache-tomcat-8.5.32.tar.gz
drwxr-xr-x 11 root root 4096 Jun 29 13:39 sonarqube
-rw-r--r-- 1 root root 158122606 Jun 29 14:39 sonarqube-7.2.1.zip
-rw-rw-r-- 1 ubuntu ubuntu 97034099 Jul 20 13:46 jfrog-artifactory-oss-6.1.0.zip
drwxr-xr-x 9 root root 4096 Jul 24 13:29 tomcat
drwxr-xr-x 14 artifactory artifactory 4096 Jul 24 13:35 artifactory
drwxr-xr-x 5 root root 4096 Jul 24 14:05 devops
-rw-r--r-- 1 root root 206911146 Jul 24 15:21 kibana-6.3.1-amd64.deb
-rw-r--r-- 1 root root 145476872 Jul 24 15:21 logstash-6.3.1.deb
-rw-r--r-- 1 root root 91357434 Jul 24 15:22 elasticsearch-6.3.1.deb
-rwxr-xr-x 1 root root 2027 Jul 25 04:40 readingXMLFileUsingSAXAPI.py
-rw-r--r-- 1 root root 4413 Jul 25 04:40 books.py
root@ip-172-31-25-236:/opt# mkdir devopsqa
root@ip-172-31-25-236:/opt# ls -ld devopsqa/
drwxr-xr-x 2 root root 4096 Jul 25 14:15 devopsqa/
root@ip-172-31-25-236:/opt# cp -pvr tomcat/ devopsqa/
'tomcat/' -> 'devopsqa/tomcat'
'tomcat/conf' -> 'devopsqa/tomcat/conf'

```

Change the Port "server.xml":

```

22 <Server port="9005" shutdown="SHUTDOWN">
23 <Listener className="org.apache.catalina.startup.VersionLoggerListener" />

```

```

69 <Connector port="9080" protocol="HTTP/1.1"
70 connectionTimeout="20000"
71 redirectPort="9443" />
72 <!-- A "Connector" using the shared thread pool-->

```

```

115 <!-- Define an AJP 1.3 Connector on port 8009 -->
116 <Connector port="9009" protocol="AJP/1.3" redirectPort="9443" />
117

```

```

root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# pwd
/opt/devopsqa/tomcat/conf
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# ls
Catalina catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# grep -H -n port server.xml
server.xml:22:<Server port="9005" shutdown="SHUTDOWN">
server.xml:67:    Define a non-SSL/TLS HTTP/1.1 Connector on port 8080
server.xml:69:    <Connector port="9080" protocol="HTTP/1.1"
server.xml:75:        port="8080" protocol="HTTP/1.1"
server.xml:79:    <!-- Define a SSL/TLS HTTP/1.1 Connector on port 8443
server.xml:88:    <Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
server.xml:96:    <!-- Define a SSL/TLS HTTP/1.1 Connector on port 8443 with HTTP/2
server.xml:103:    <Connector port="8443" protocol="org.apache.coyote.http11.Http11AprProtocol"
server.xml:115:    <!-- Define an AJP 1.3 Connector on port 8009 -->
server.xml:116:    <Connector port="9009" protocol="AJP/1.3" redirectPort="9443" />
server.xml:125:    <!-- You should set jvmRoute to support load-balancing via AJP ie :
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# |

```

STEP-2:

```
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# pwd
/opt/devopsqa/tomcat/conf
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf# tail -5 tomcat-users.xml
-->
<role rolename="admin-gui"/>
<role rolename="manager-gui"/>
<user username="admin" password="redhat@123" roles="admin-gui,manager-gui"/>
</tomcat-users>
root@ip-172-31-25-236:/opt/devopsqa/tomcat/conf#
```

STEP-3:

```
root@ip-172-31-25-236:/opt/devopsqa/tomcat/bin# pwd
/opt/devopsqa/tomcat/bin
root@ip-172-31-25-236:/opt/devopsqa/tomcat/bin# ls
bootstrap.jar  catalina.sh  commons-daemon.jar  configtest.bat  daemon.sh  digest.sh
catalina.bat  catalina-tasks.xml  commons-daemon-native.tar.gz  configtest.sh  digest.bat  setclasspath
root@ip-172-31-25-236:/opt/devopsqa/tomcat/bin# ./startup.sh
Using CATALINA_BASE:   /opt/devopsqa/tomcat
Using CATALINA_HOME:   /opt/devopsqa/tomcat
Using CATALINA_TMPDIR: /opt/devopsqa/tomcat/temp
Using JRE_HOME:        /usr/lib/jvm/java-8-oracle
Using CLASSPATH:       /opt/devopsqa/tomcat/bin/bootstrap.jar:/opt/devopsqa/tomcat/bin/tomcat-juli.jar
Tomcat started.
root@ip-172-31-25-236:/opt/devopsqa/tomcat/bin#
```


STEP-4:

Custom TCP F ▾	TCP	9005	Anywhere ▾	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop
Custom TCP F ▾	TCP	9080	Anywhere ▾	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop
Custom TCP F ▾	TCP	9009	Anywhere ▾	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop

STEP-5:

<http://34.227.226.140:9080/>

STEP-6:

Jenkins

Jenkins > Dev

New Item

People

Build History

Edit View

Delete View

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Credentials

Build Queue

No builds in the queue.

Build Executor Status

1 idle

2 idle

Name

Dev

Description

[Plain text] [Preview](#)

Filter build queue

Filter build executors

Job Filters

Status Filter

All selected jobs

Recurse in subfolders

Jobs

☐ Use a regular expression to include jobs into the view

Add Job Filter

Columns

Status

Weather

Name

OK

Apply

STEP-7:

Jenkins

Jenkins
 QA

New Item
 People
 Build History
 Edit View
 Delete View
 Project Relationship
 Check File Fingerprint
 Manage Jenkins
 My Views
 Credentials

Build Queue

No builds in the queue.

Build Executor Status

1 Idle
 2 Idle

Name QA

Description

[Plain text] [Preview](#)

Filter build queue ☐
 Filter build executors ☐

Job Filters

Status Filter All selected jobs

Recurse in subfolders ☐
 Jobs ☐ devops
☐ Use a regular expression to include jobs into the view

Add Job Filter

Columns

Status

Weather

Name

OK

Apply

STEP-8:

All Dev QA +

This view has no jobs associated with it. You can either [add some existing jobs](#) to this view or create a new job in this view.


STEP-9:


Jenkins > QA

Enter an item name


devopsqa


» Required field

**Freestyle project**
This is the central feature of Jenkins. Jenkins something other than software build.

**Maven project**
Build a maven project. Jenkins takes advantage

if you want to create a new item from other existing, you can use this option:

 Copy from: devops

 Add to current view

STEP-10: Remove Choice Parameter

☐ GitHub project

☒ This project is parameterized

Git Parameter

Name: branch

Description:

Parameter Type: Tag

Advanced...

Choice Parameter

Name: tag

Choices: no, yes

STEP-11:

☒ This project is parameterized

Git Parameter

Name

Description

Parameter Type

Advanced...

Add Parameter

☐ Throttle builds

☐ Prepare an environment for the run

☐ Disable this project

☐ Execute concurrent builds if necessary

Advanced...

Source Code Management

STEP-12:

Source Code Management

☐ None

☒ Git

Repositories

Repository URL

Credentials

Advanced...

Add Repository

Branches to build

Branch Specifier (blank for 'any')

Add Branch

Repository browser

Additional Behaviours

☐ Clean before checkout

☐ Check out to specific local branch

Branch name

STEP-13:

Build

Root POM: ?

Goals and options: ?

[Advanced...](#)

Post Steps

☐ Run only if build succeeds
 ☐ Run only if build succeeds or is unstable
 ☒ Run regardless of build result

Should the post-build steps run only for successful builds, etc.

[Add post-build step](#) ▼

Build Settings

☐ E-mail Notification

Post-build Actions

[Add post-build action](#) ▼

STEP-16:

```
QA:
curl -u ${tcuser}:${tcpass} -T target/**.war "http://localhost:9080/manager/text/deploy?path=/devops&update=true"
```

Post Steps

☐ Run only if build succeeds
 ☐ Run only if build succeeds or is unstable
 ☒ Run regardless of build result

Should the post-build steps run only for successful builds, etc.

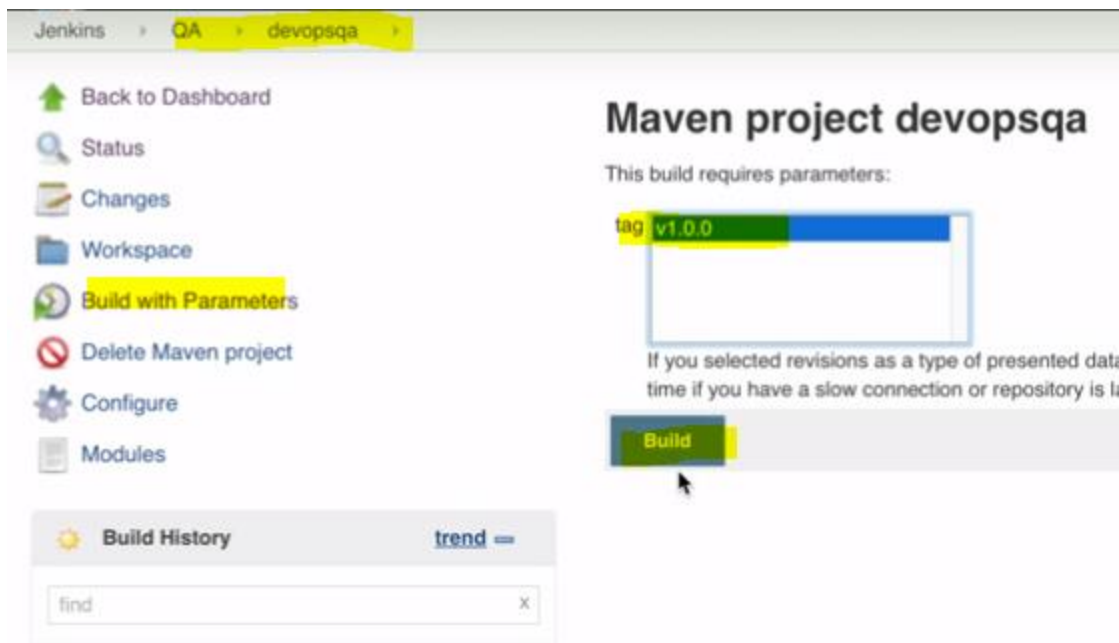
Execute shell X ?

Command

```
curl -u ${tcuser}:${tcpass} -T target/**.war "http://localhost:9080/manager/text/deploy?path=/devops&update=true"
```

STEP-17:


STEP-18:



STEP-19:

```
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 18.098 s
[INFO] Finished at: 2017-07-29T11:31:41-05:00
[INFO] Final Memory: 41M/450M
[INFO] -----
[JENKINS] Archiving /Users/Shared/Jenkins/Home/workspace/devopsqa/pom.xml to com.example/devops/1.0.0/devops-1.0.0.pom
[JENKINS] Archiving /Users/Shared/Jenkins/Home/workspace/devopsqa/target/devops-1.0.0.war to com.example/devops/1.0.0/devops-1.0.0.war
[devopsqa] $ /bin/sh -xe /Users/Shared/Jenkins/tmp/[*****]3858332628365382692.sh
channel stopped
+ curl -u [*****]:[*****] -T target/devops-1.0.0.war 'http://localhost:9080/manager/text/deploy?path=/devops&update=true'
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           % Dload  % Upload   Total   Spent    Left   Speed
  0     0    0     0     0     0      0      0 --:--:-- --:--:-- --:--:--    0
100 20.2M    0     0 100 20.2M      0 19.8M  0:00:01  0:00:01 --:--:-- 19.9M
100 20.2M    0     0 100 20.2M      0 10.0M  0:00:02  0:00:02 --:--:-- 10.0M
100 20.2M    0     0 100 20.2M      0 6876k  0:00:03  0:00:03 --:--:-- 6877k
100 20.2M    0     0 100 20.2M      0 5165k  0:00:04  0:00:04 --:--:-- 5166k
100 20.2M    0     0 100 20.2M      0 4076k  0:00:05  0:00:05 --:--:-- 4076k
100 20.2M    0     0 100 20.2M      0 3407k  0:00:06  0:00:06 --:--:--    0
100 20.2M    0     0 100 20.2M      0 2926k  0:00:07  0:00:07 --:--:--    0
100 20.2M    0    52 100 20.2M      6 2708k  0:00:07  0:00:07 --:--:--    0
OK - Deployed application at context path [/devops]
Finished: SUCCESS
```

STEP-20:



Tomcat Web Application Manager

Message: OK


Manager

[List Applications](#)
[HTML Manager Help](#)
[Manager Help](#)

Applications

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>
/devops	None specified		true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>
/docs	None specified	Tomcat Documentation	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>

STEP-21:



Tomcat Web Application Manager

Message: OK

Manager


[List Applications](#)
[HTML Manager Help](#)

Applications

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>
/devops	None specified		true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>
/docs	None specified	Tomcat Documentation	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30</div>

localhost
localhost:8080/devops

devopsqa #1 Console [Jenkins]
devops/pom.xml at release/in...
Artifactory
Index of libs-release-local/co...



Welcome to the DevOps Course

Course Name: DevOps

Release the Code to Prd from Artifactory

STEP-1:

```

root@ip-172-31-25-236:/opt# pwd
/opt
root@ip-172-31-25-236:/opt# mkdir devopsprd
root@ip-172-31-25-236:/opt#
root@ip-172-31-25-236:/opt# ls -ld devopsprd/
drwxr-xr-x 2 root root 4096 Jul 25 14:52 devopsprd/
root@ip-172-31-25-236:/opt# cp -pr tomcat/ devopsprd/
root@ip-172-31-25-236:/opt# ls -ld devopsprd/
drwxr-xr-x 3 root root 4096 Jul 25 14:53 devopsprd/
root@ip-172-31-25-236:/opt# ls -ld devopsprd/*
drwxr-xr-x 9 root root 4096 Jul 24 13:29 devopsprd/tomcat
root@ip-172-31-25-236:/opt# ls -ld devopsprd/tomcat/*
drwxr-x--- 2 root root 4096 Jul 24 13:29 devopsprd/tomcat/bin
drwx----- 3 root root 4096 Jul 24 15:12 devopsprd/tomcat/conf
drwxr-x--- 2 root root 4096 Jul 24 13:29 devopsprd/tomcat/lib
-rw-r----- 1 root root 57092 Jun 20 19:53 devopsprd/tomcat/LICENSE
drwxr-x--- 2 root root 4096 Jul 25 05:59 devopsprd/tomcat/logs
-rw-r----- 1 root root 1723 Jun 20 19:53 devopsprd/tomcat/NOTICE
-rw-r----- 1 root root 7138 Jun 20 19:53 devopsprd/tomcat/RELEASE-NOTES
-rw-r----- 1 root root 16246 Jun 20 19:53 devopsprd/tomcat/RUNNING.txt
drwxr-x--- 2 root root 4096 Jul 24 13:29 devopsprd/tomcat/temp
drwxr-x--- 7 root root 4096 Jun 20 19:51 devopsprd/tomcat/webapps
drwxr-x--- 3 root root 4096 Jul 24 13:34 devopsprd/tomcat/work
root@ip-172-31-25-236:/opt#

```

STEP-2:

```

root@ip-172-31-25-236:/opt/devopsprd/tomcat/conf# pwd
/opt/devopsprd/tomcat/conf
root@ip-172-31-25-236:/opt/devopsprd/tomcat/conf# grep -H -n -E '7080|7443|7080' server.xml
server.xml:69: <Connector port="7080" protocol="HTTP/1.1"
server.xml:71:         redirectPort="7443" />
server.xml:116: <Connector port="7089" protocol="AJP/1.3" redirectPort="7443" />
root@ip-172-31-25-236:/opt/devopsprd/tomcat/conf#

```

STEP-3:

Custom TCP F ▾	TCP	7080	Anywhere ▾	0.0.0.0/0, ::0	e.g. SSH for Admin Desktop	✕
Custom TCP F ▾	TCP	7009	Anywhere ▾	0.0.0.0/0, ::0	e.g. SSH for Admin Desktop	✕

STEP-4:

```

root@ip-172-31-25-236:/opt/devopsprd/tomcat/bin# ./startup.sh
Using CATALINA_BASE:   /opt/devopsprd/tomcat
Using CATALINA_HOME:   /opt/devopsprd/tomcat
Using CATALINA_TMPDIR: /opt/devopsprd/tomcat/temp
Using JRE_HOME:        /usr/lib/jvm/java-8-oracle
Using CLASSPATH:       /opt/devopsprd/tomcat/bin/bootstrap.jar:/opt/devopsprd/tomcat/bin/tomcat-juli.jar
Tomcat started.

```

STEP-5:

<http://34.227.226.140:7080/>

