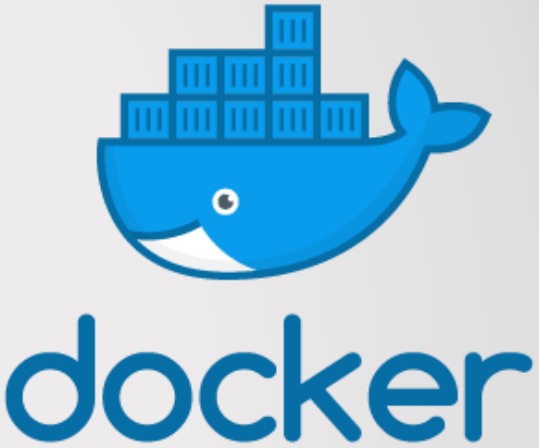
Delivery of App to AWS S3 Bucket

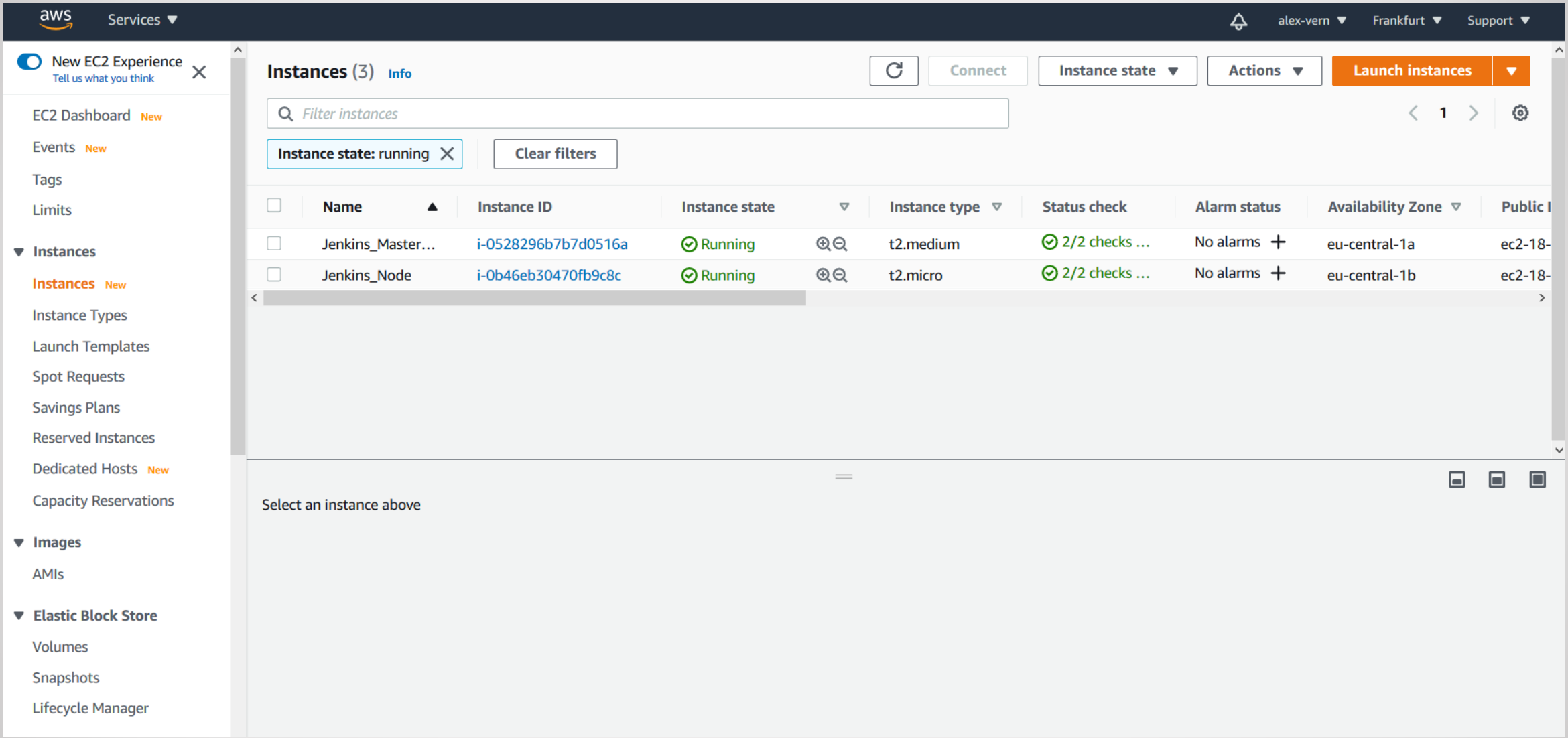
Project steps:

- Raise two instances in AWS EC2 for master and worker
- Raise two AWS S3 Buckets for file sharing and static website
- Raise Jenkins inside Docker
- Create two jobs for generating .jar files and delivering them to AWS S3 Bucket
- Create WordPress site on AWS Lightsail and make link to .jar file
- Set up Webhook on Github for starting jobs in Jenkins by push request

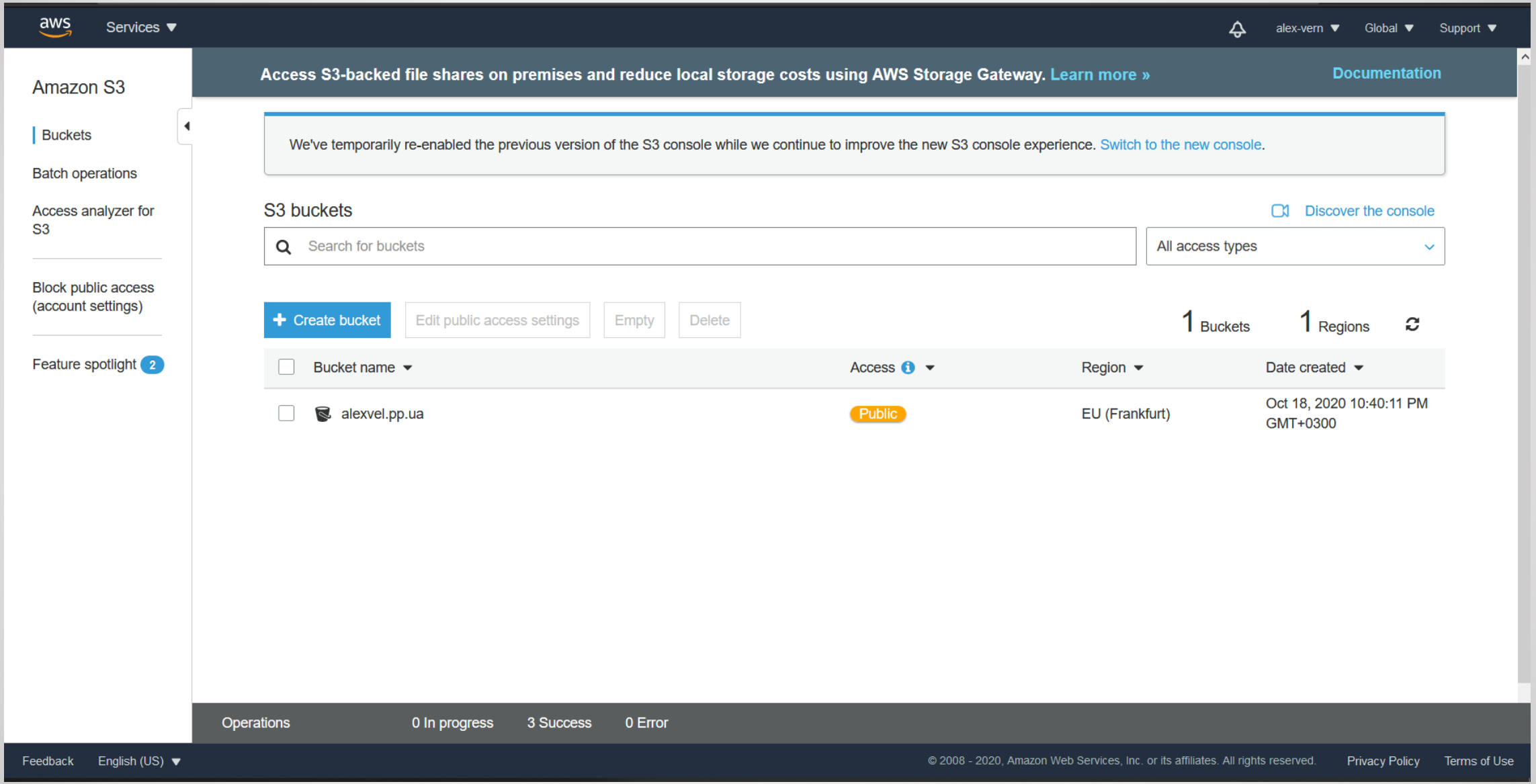
Used tools:



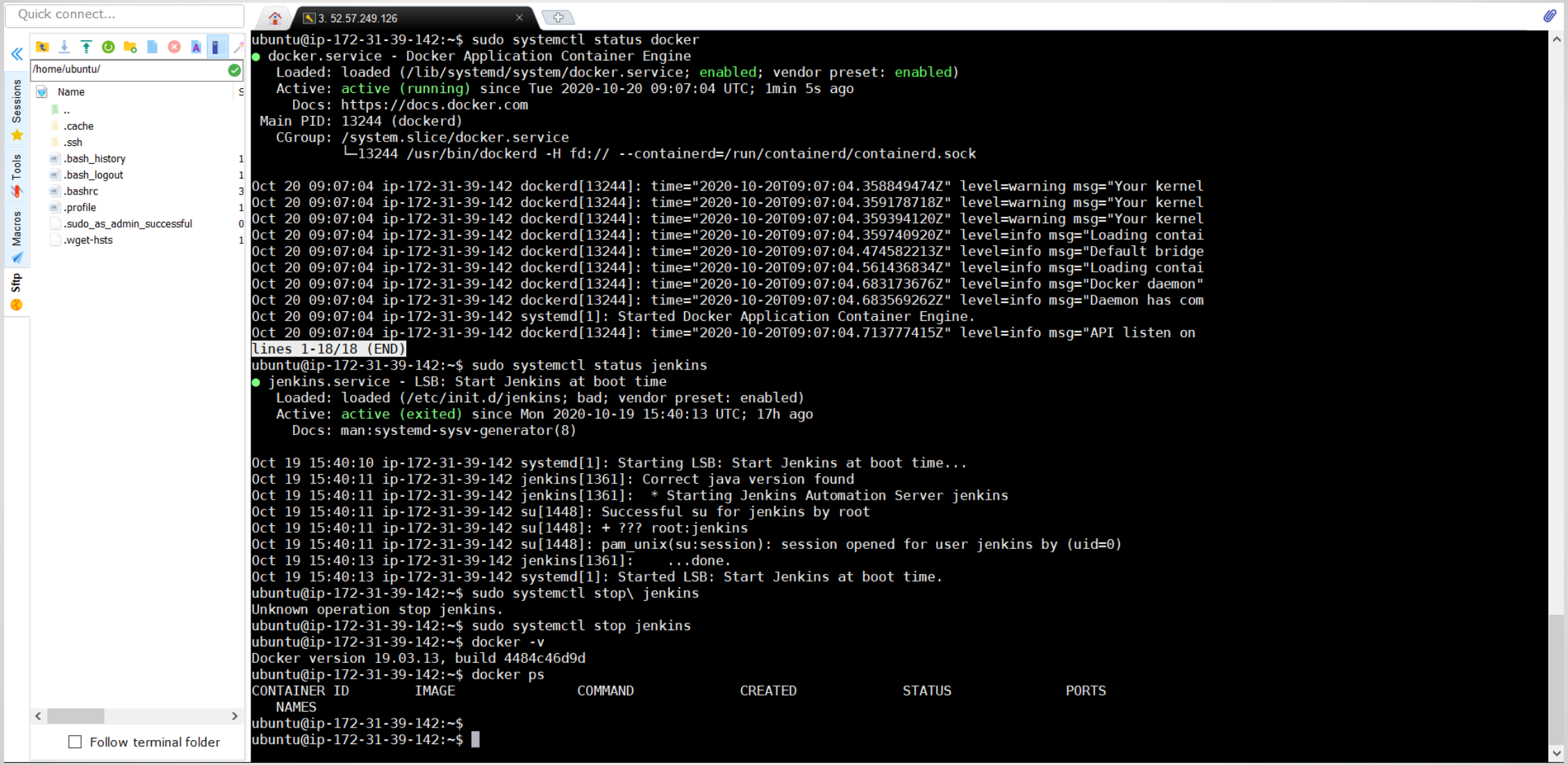
Raising of two instances in AWS EC2



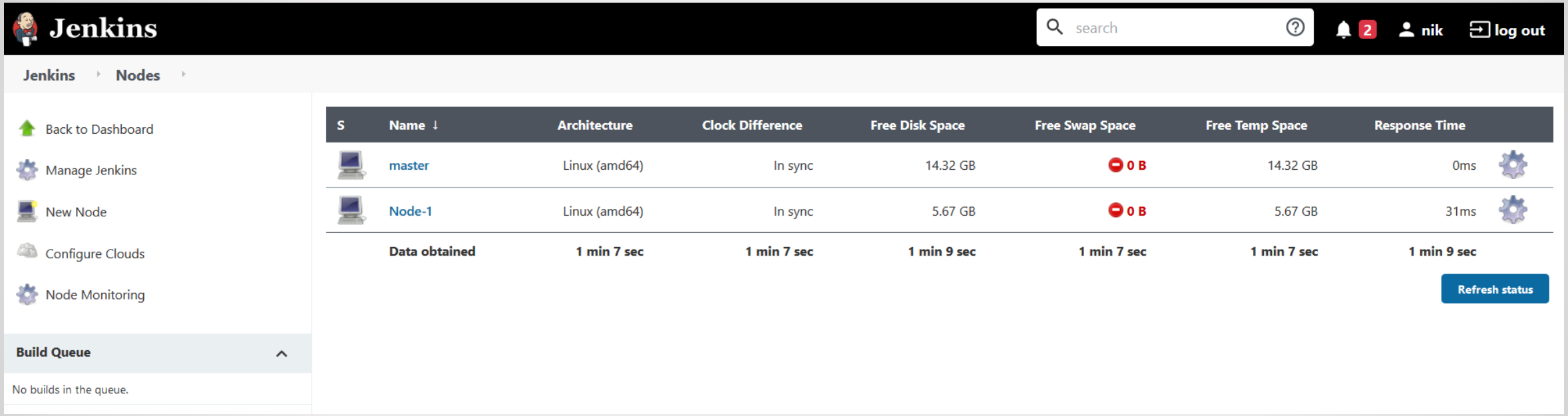
Raising of AWS S3 Bucket for .jar file uploading



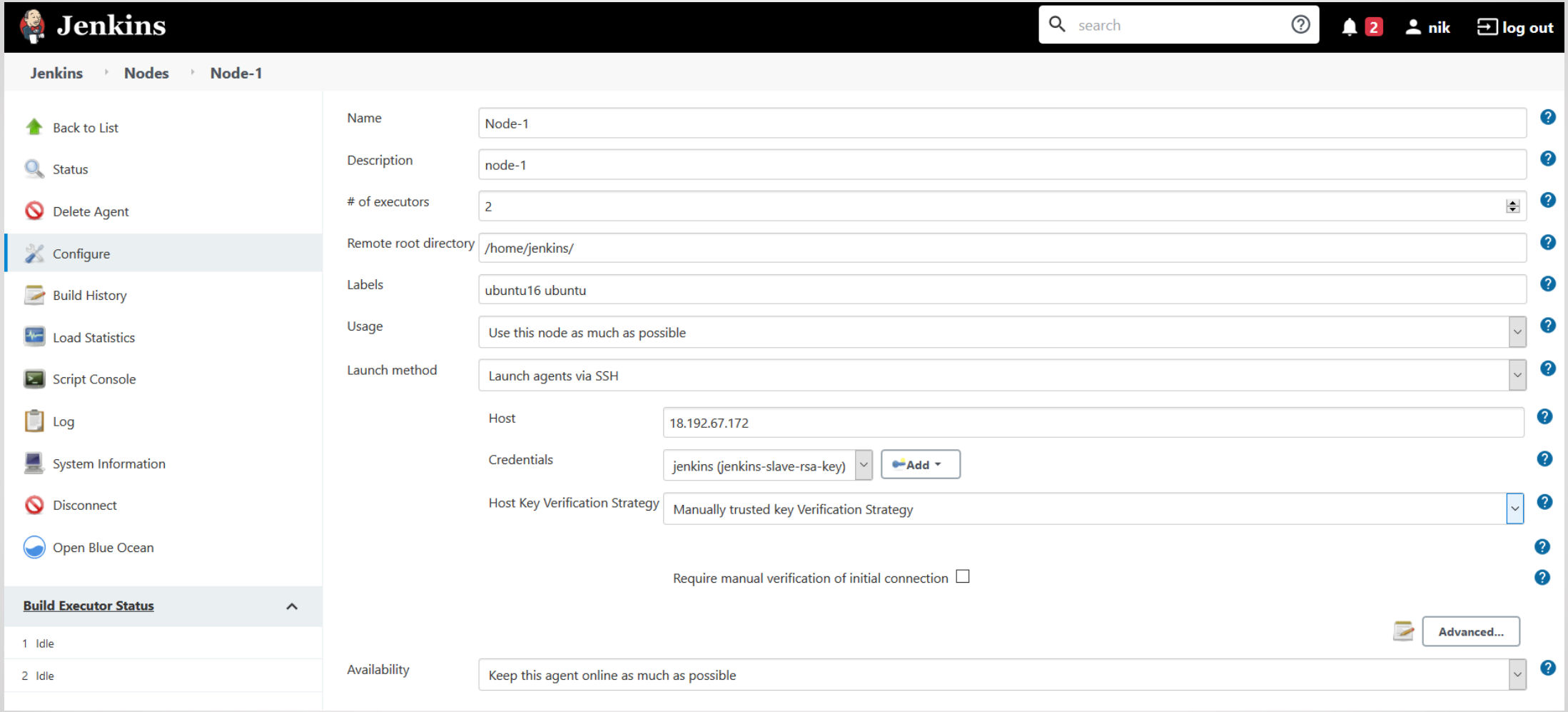
Raising Jenkins inside Docker



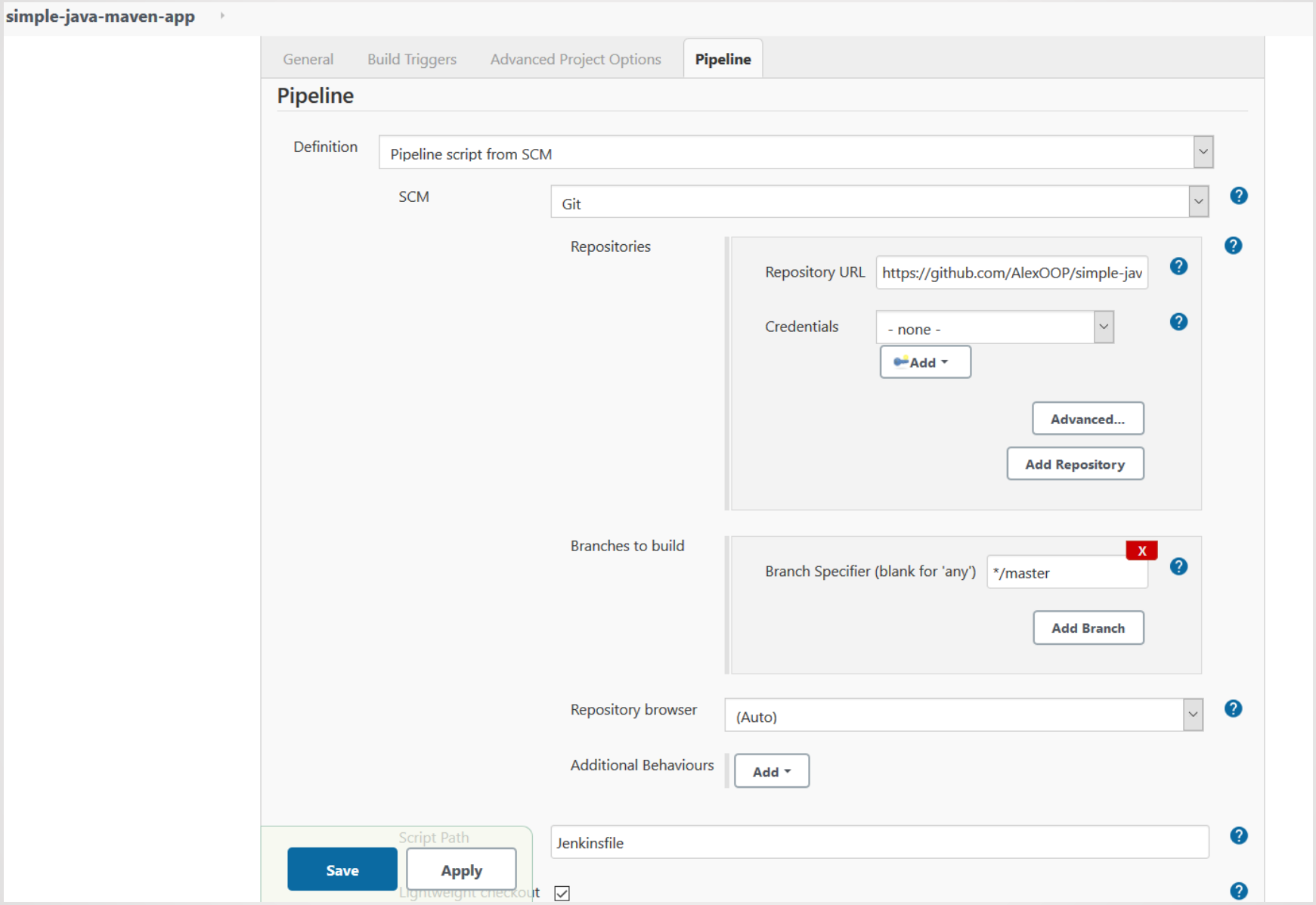
Creating two nodes



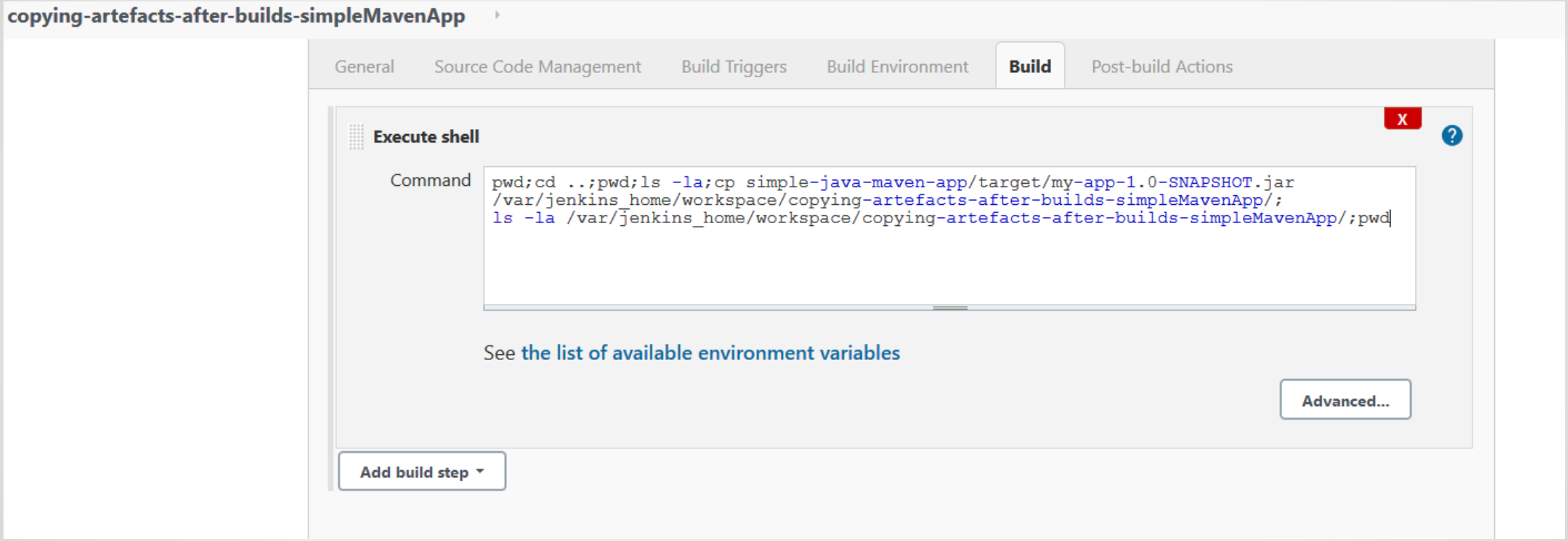
Connecting 2nd node for tasks execution



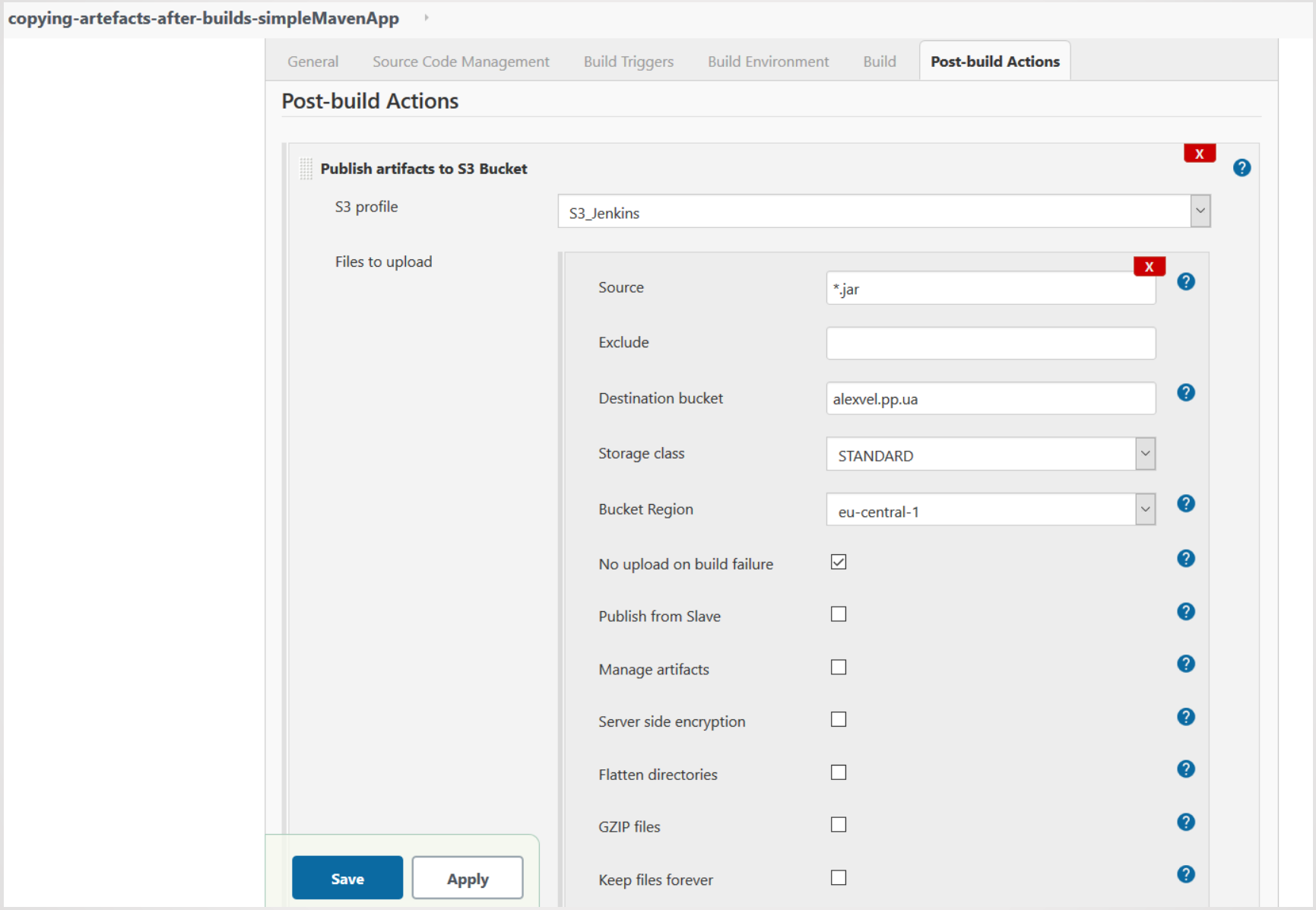
Setting up 1st job



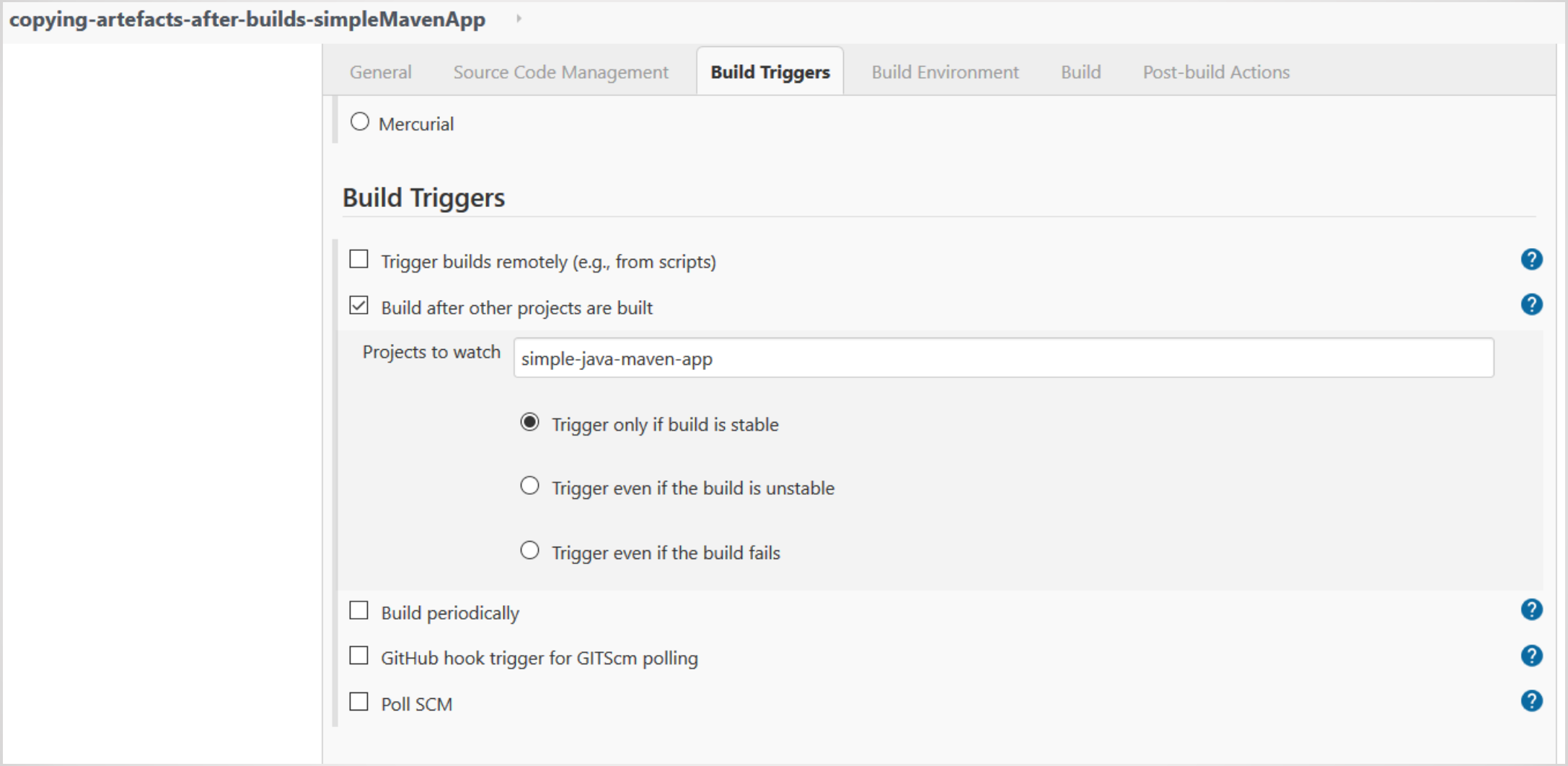
Copying generated .jar file to workspace of 2nd job



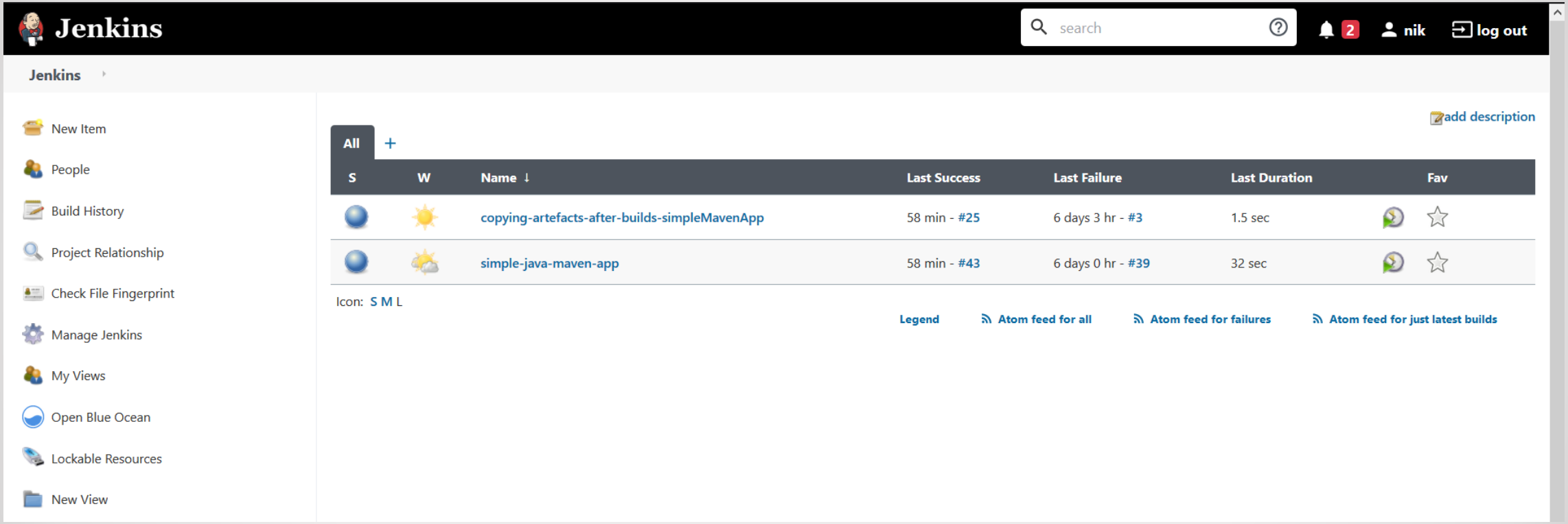
Uploading .jar file to AWS S3 Bucket



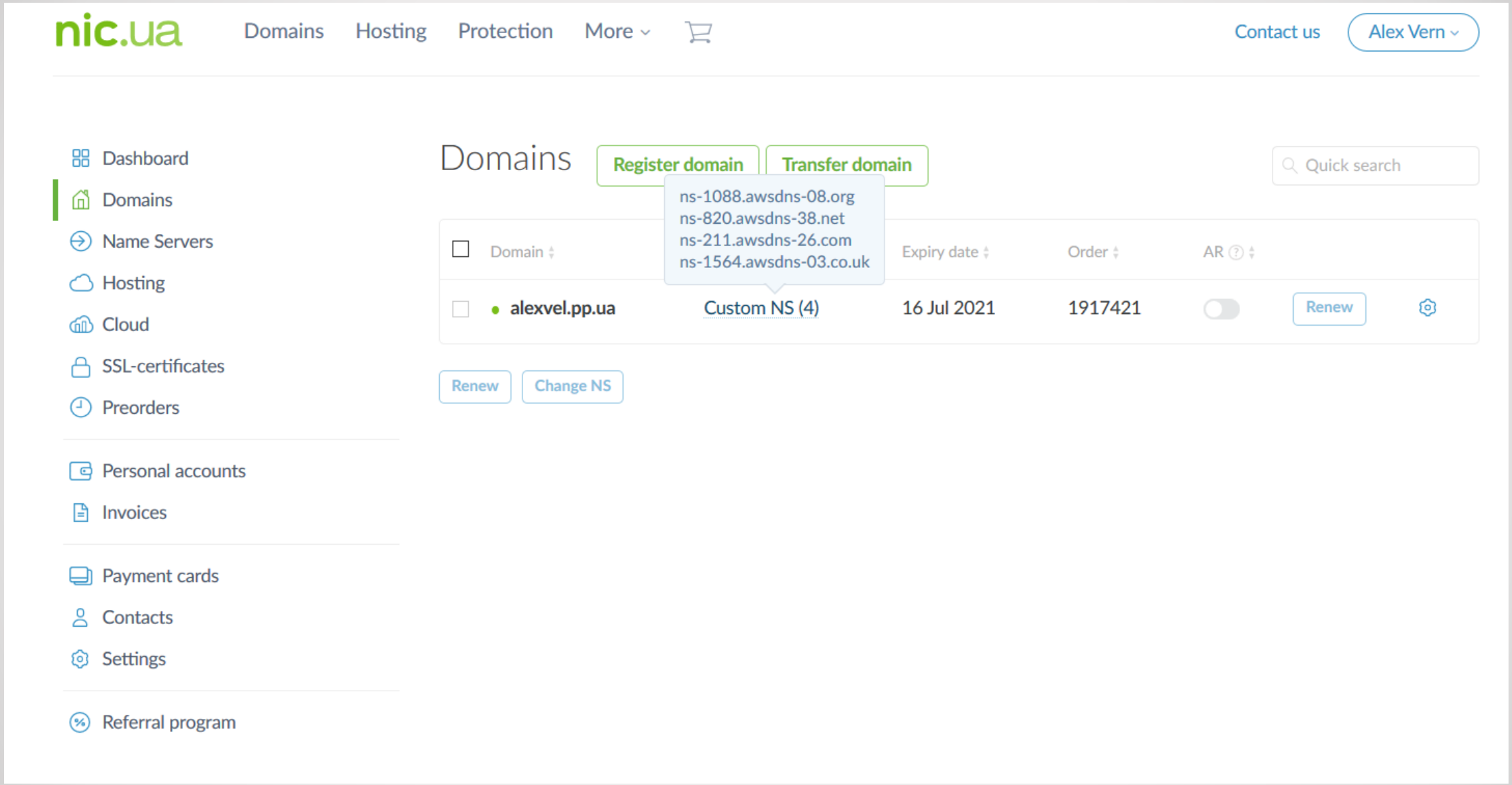
Trigger configuration for 2nd job



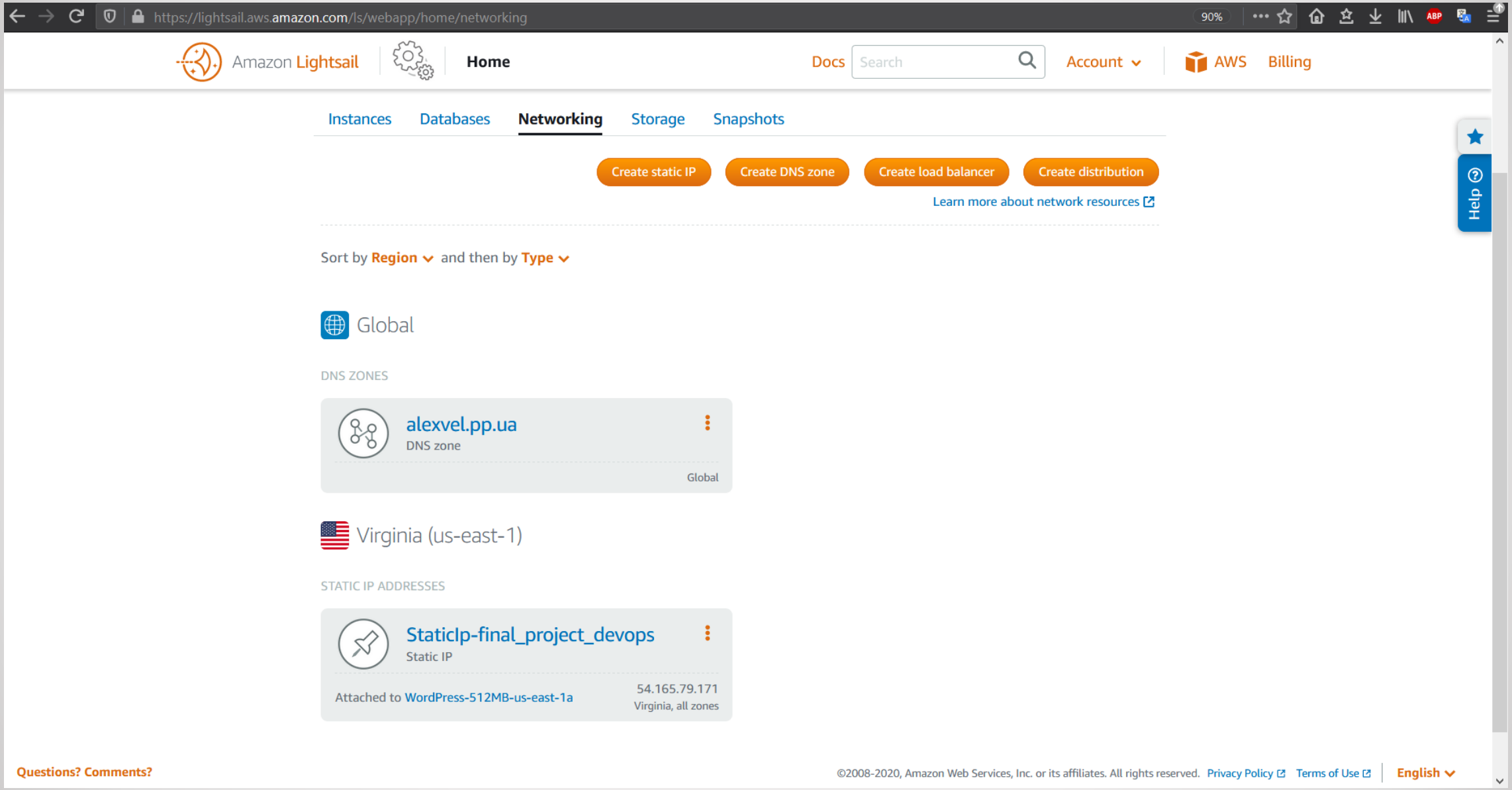
Two Jenkins jobs



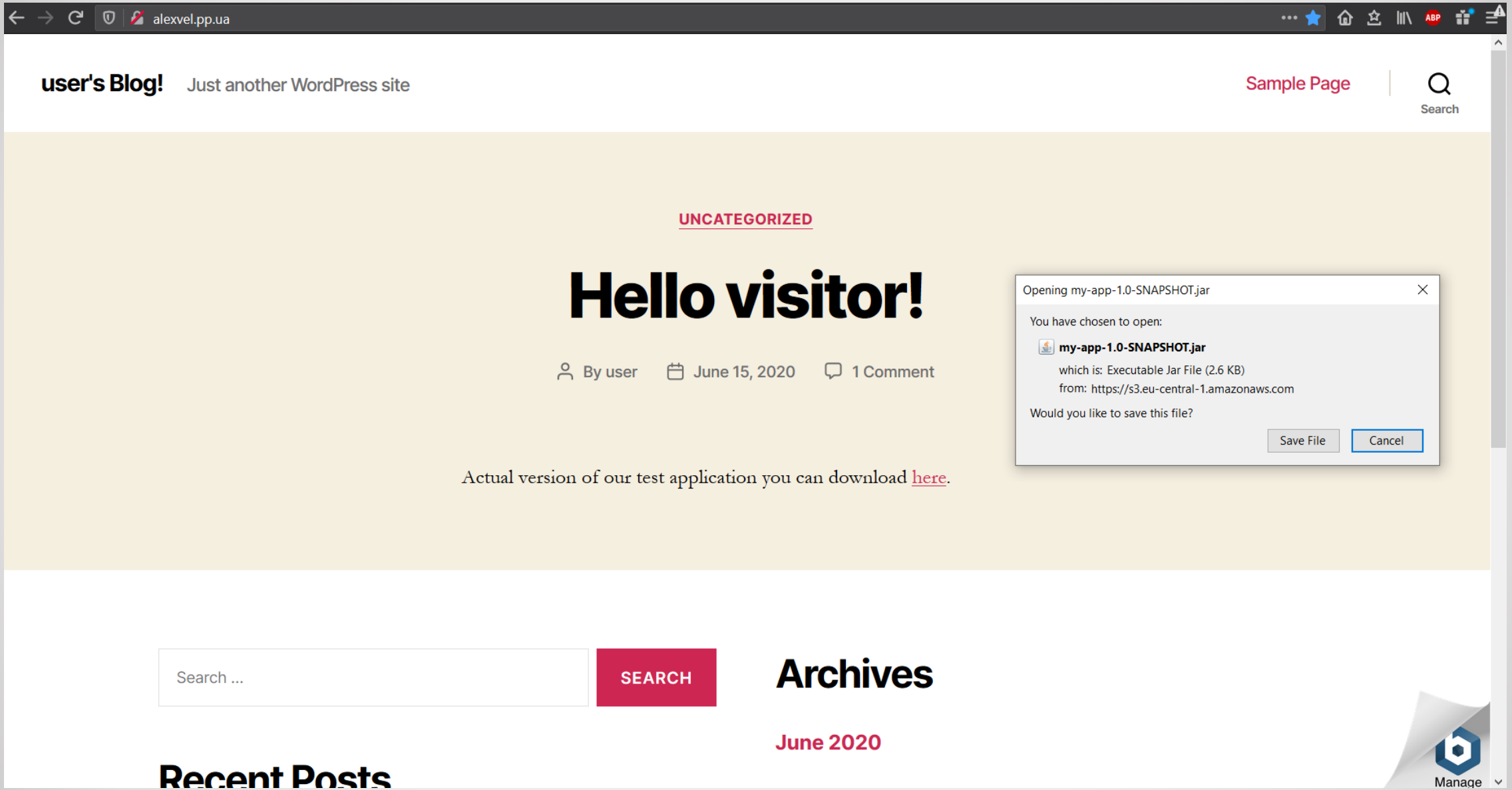
Registration of domain name



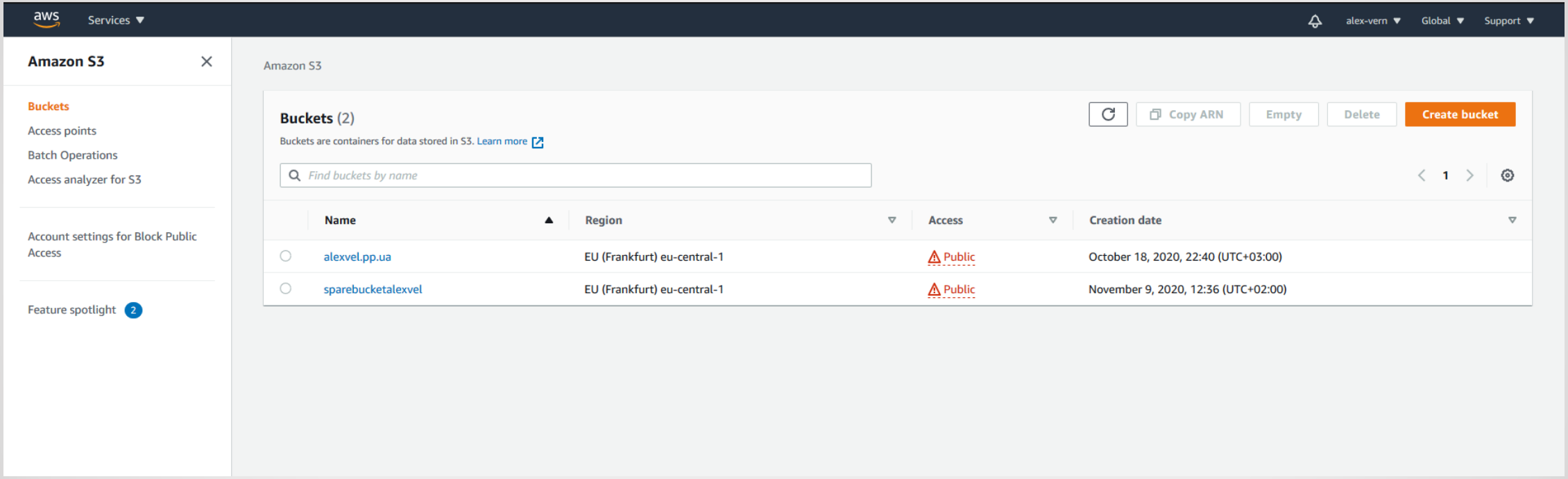
Creating WordPress website and static IP in AWS Lightsail



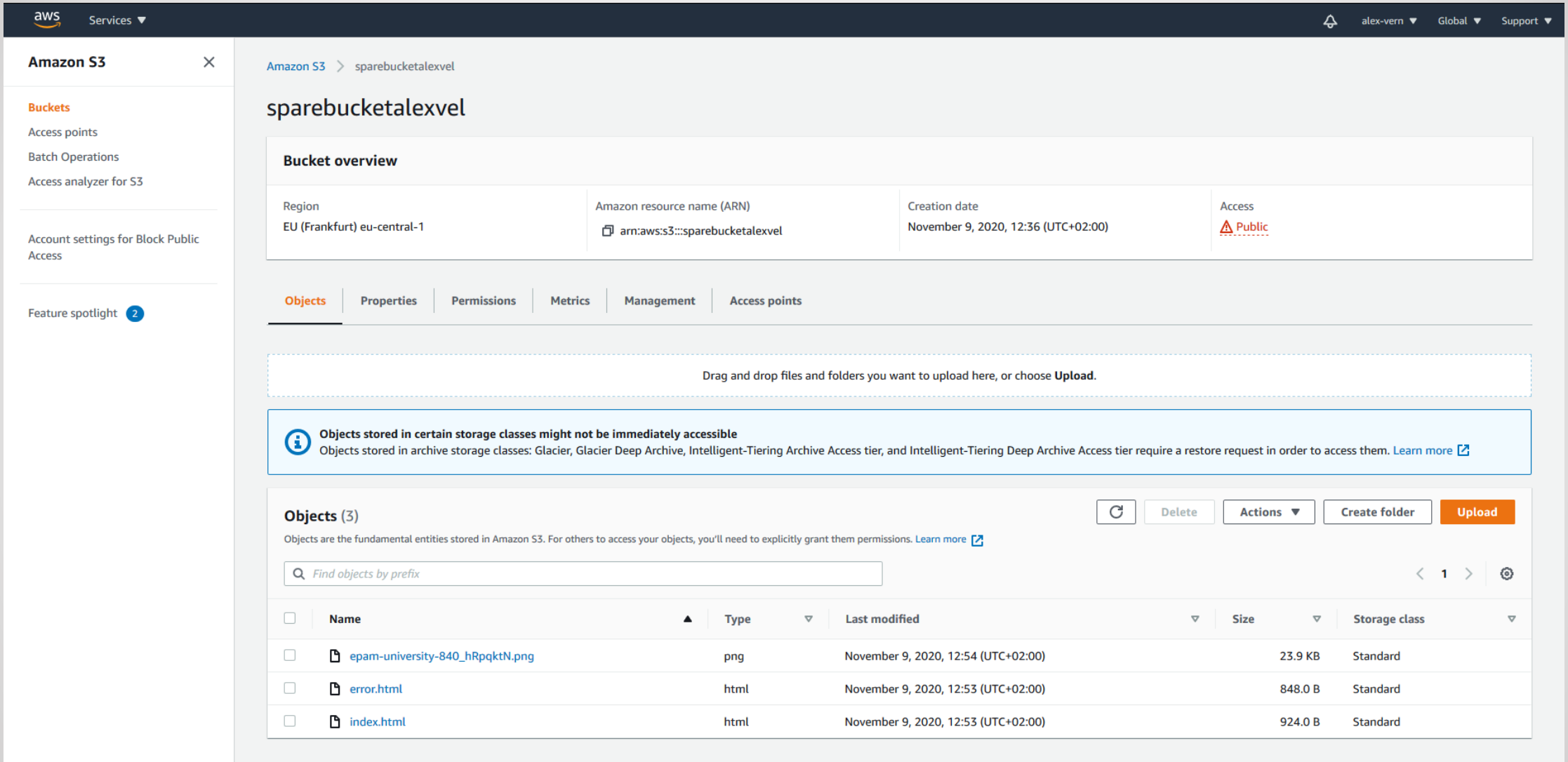
WordPress website



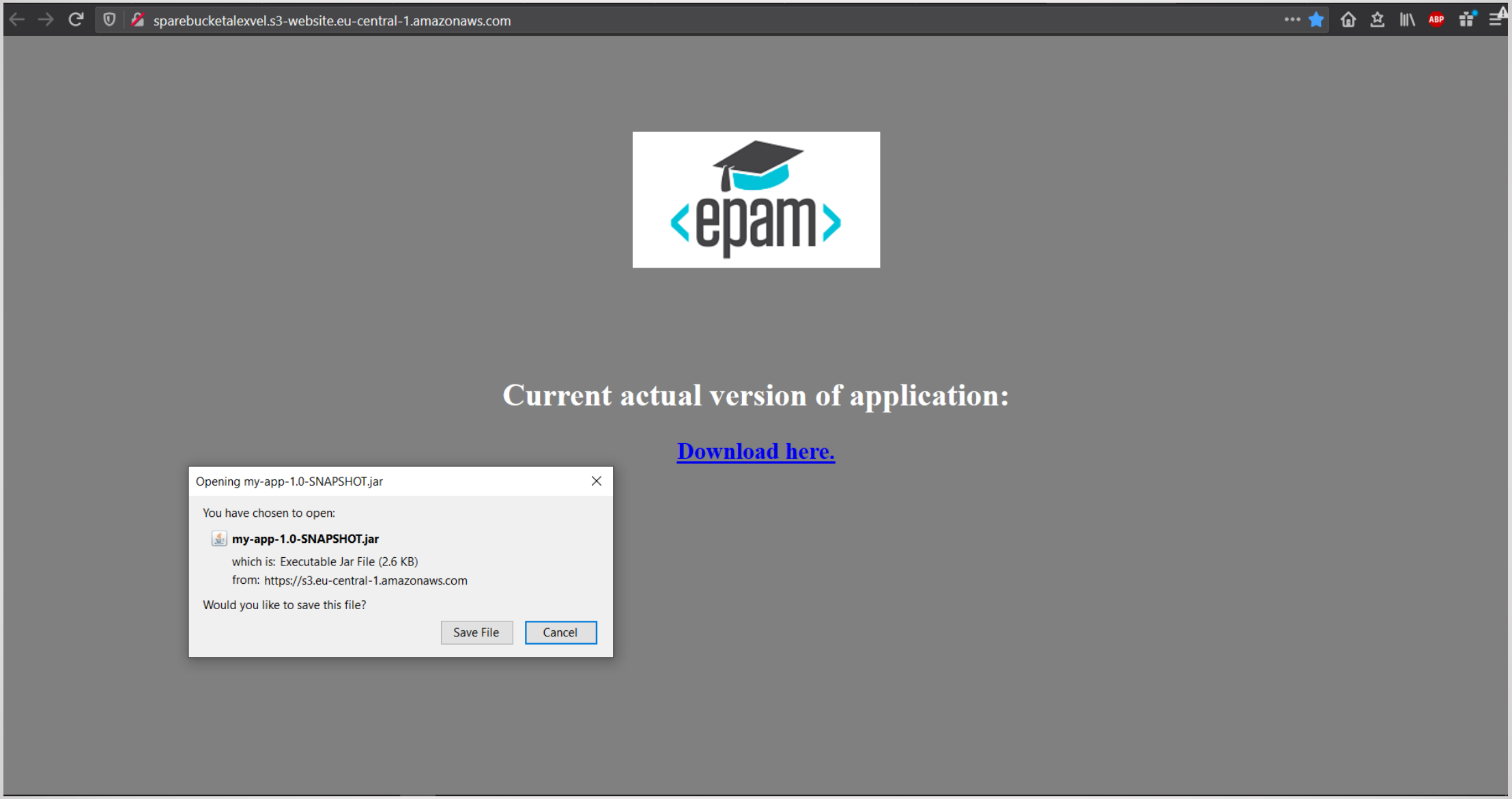
2nd AWS S3 Bucket



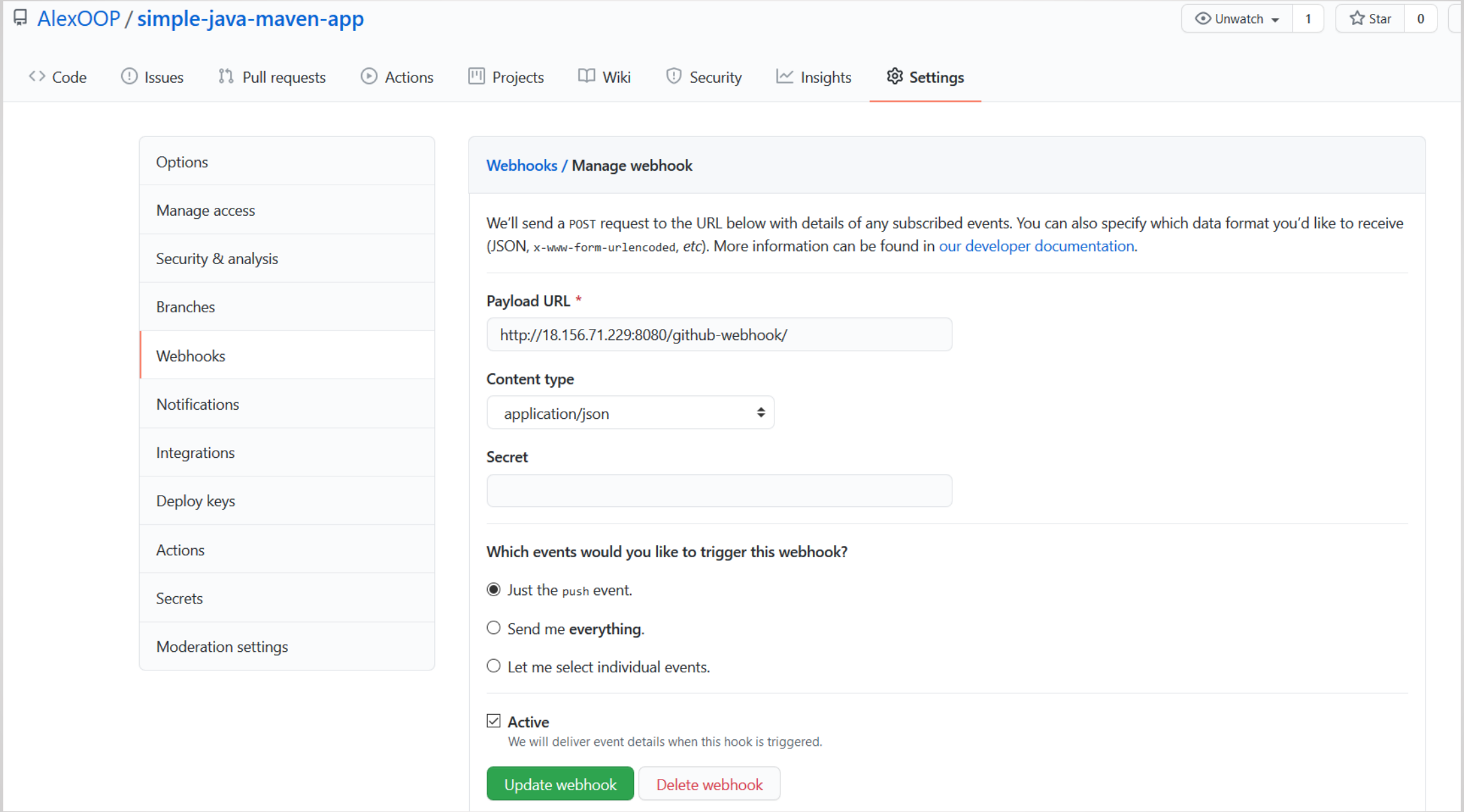
Configuration of 2nd AWS S3 Bucket



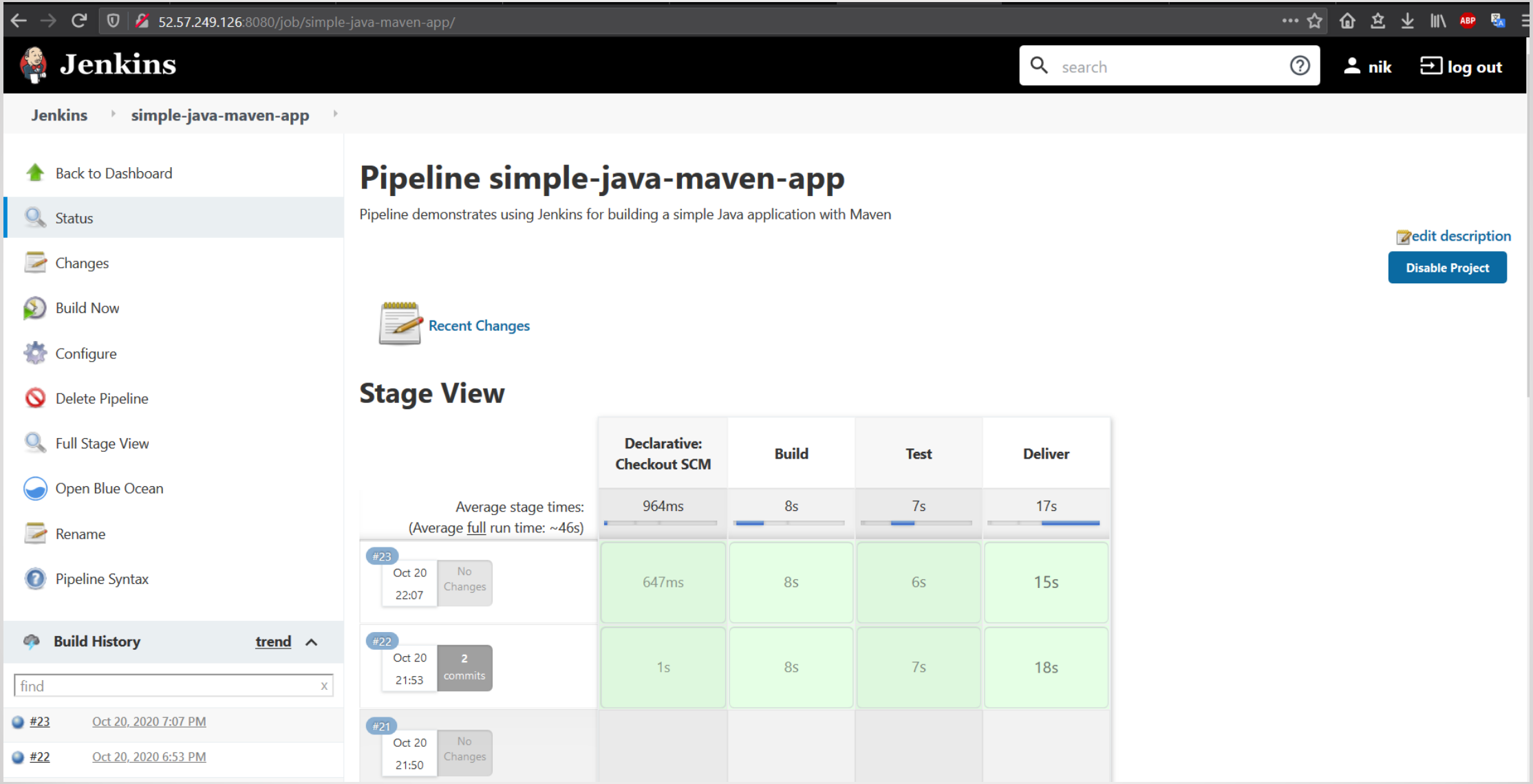
Static website at 2nd AWS S3 Bucket



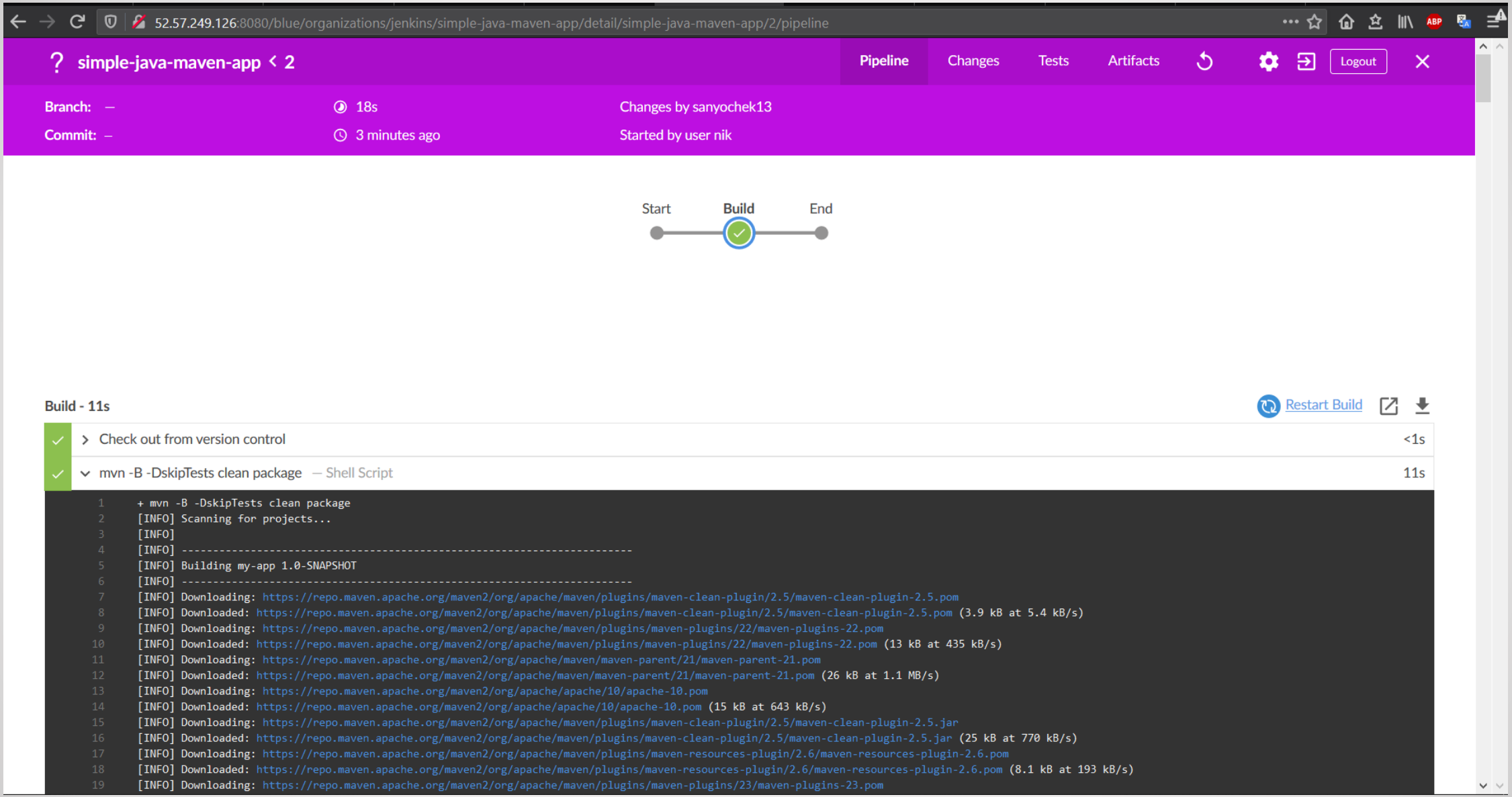
GitHub Webhook configuration



Common stage view of 1st job



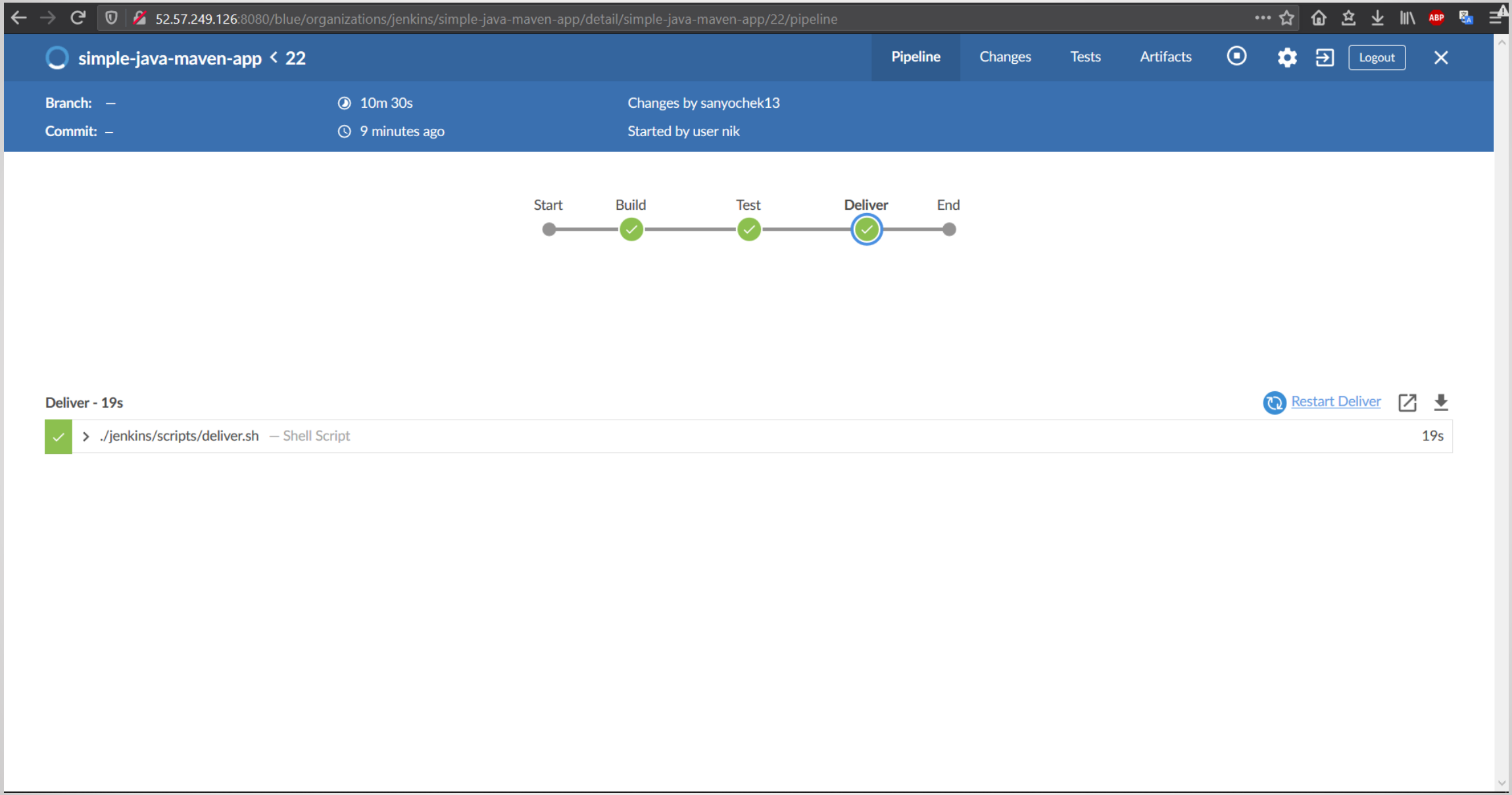
Build stage


52.57.249.126:8080/blue/organizations/jenkins/simple-java-maven-app/detail/simple-java-maven-app/2/pipeline
simple-java-maven-app < 2
Pipeline
Changes
Tests
Artifacts
Logout
Branch: –
Commit: –
18s
3 minutes ago
Changes by sanyochek13
Started by user nik
Start
Build
End
Build - 11s
Restart Build
Check out from version control
<1s
mvn -B -DskipTests clean package — Shell Script
11s
+ mvn -B -DskipTests clean package
[INFO] Scanning for projects...
[INFO]
[INFO] --
[INFO] Building my-app 1.0-SNAPSHOT
[INFO] --
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom (3.9 kB at 5.4 kB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/22/maven-plugins-22.pom
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/22/maven-plugins-22.pom (13 kB at 435 kB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/21/maven-parent-21.pom
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/21/maven-parent-21.pom (26 kB at 1.1 MB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/apache/10/apache-10.pom
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/apache/10/apache-10.pom (15 kB at 643 kB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.jar
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.jar (25 kB at 770 kB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/2.6/maven-resources-plugin-2.6.pom
[INFO] Downloaded: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/2.6/maven-resources-plugin-2.6.pom (8.1 kB at 193 kB/s)
[INFO] Downloading: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/23/maven-plugins-23.pom

Test stage


52.57.249.126:8080/blue/organizations/jenkins/simple-java-maven-app/detail/simple-java-maven-app/7/pipeline
Start
Build
Test
End
Test - 5s
Restart Test
mvn test — Shell Script
5s
+ mvn test
[INFO] Scanning for projects...
[INFO]
[INFO] --
[INFO] Building my-app 1.0-SNAPSHOT
[INFO] --
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ my-app ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/jenkins_home/workspace/simple-java-maven-app/src/main/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ my-app ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ my-app ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/jenkins_home/workspace/simple-java-maven-app/src/test/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ my-app ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ my-app ---
[INFO] No tests to run.
[INFO] --
[INFO] BUILD SUCCESS
[INFO] --
[INFO] Total time: 1.840 s
[INFO] Finished at: 2020-10-20T12:36:23Z
[INFO] Final Memory: 7M/18M
[INFO] --

Delivery stage



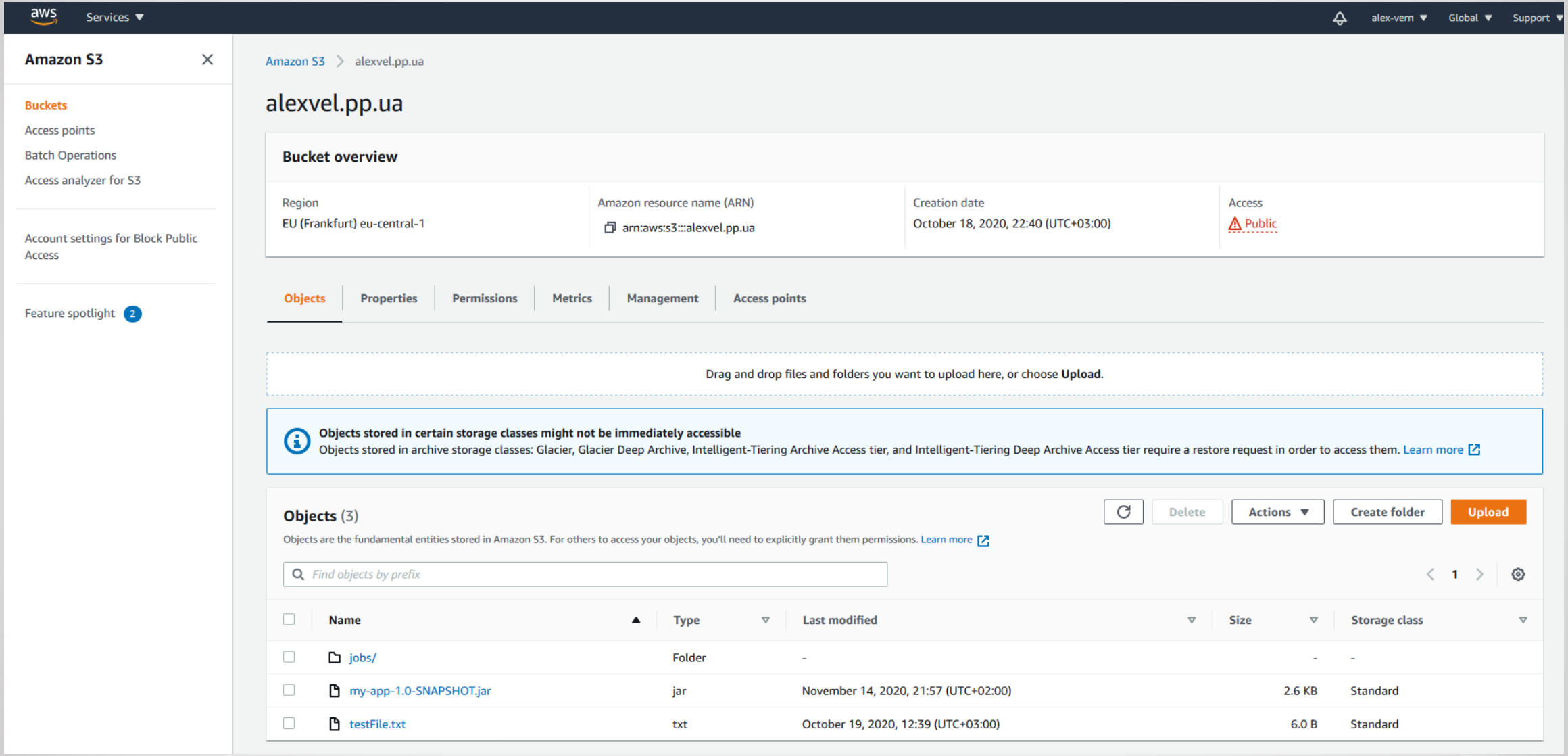
All stages log

52.57.249.126:8080/blue/organizations/jenkins/simple-java-maven-app/detail/simple-java-maven-app/22/pipeline

./jenkins/scripts/deliver.sh — Shell Script 19s

```
468/621 kB | 295/500 kBProgress (2): 472/621 kB | 295/500 kBProgress (2): 476/621 kB | 295/500 kBProgress (2): 481/621 kB | 295/500 kBProgress (2): 485/621 kB | 295/500 kBProgress (2): 489/621 kB |
295/500 kBProgress (2): 493/621 kB | 295/500 kBProgress (2): 497/621 kB | 295/500 kBProgress (2): 501/621 kB | 295/500 kBProgress (2): 501/621 kB | 299/500 kBProgress (2): 501/621 kB | 303/500 kB
Progress (2): 501/621 kB | 307/500 kBProgress (2): 501/621 kB | 311/500 kBProgress (2): 501/621 kB | 315/500 kBProgress (2): 501/621 kB | 319/500 kBProgress (2): 501/621 kB | 324/500 kBProgress (2):
501/621 kB | 328/500 kBProgress (2): 501/621 kB | 332/500 kBProgress (2): 501/621 kB | 336/500 kBProgress (2): 501/621 kB | 340/500 kBProgress (2): 501/621 kB | 344/500 kBProgress (2): 501/621 kB |
348/500 kBProgress (2): 501/621 kB | 352/500 kBProgress (2): 501/621 kB | 356/500 kBProgress (2): 501/621 kB | 360/500 kBProgress (2): 501/621 kB | 365/500 kBProgress (2): 501/621 kB | 369/500 kB
Progress (2): 501/621 kB | 373/500 kBProgress (2): 501/621 kB | 377/500 kBProgress (2): 501/621 kB | 381/500 kBProgress (2): 501/621 kB | 385/500 kBProgress (2): 501/621 kB | 389/500 kBProgress (2):
501/621 kB | 393/500 kBProgress (2): 505/621 kB | 393/500 kBProgress (2): 509/621 kB | 393/500 kBProgress (2): 513/621 kB | 393/500 kBProgress (2): 517/621 kB | 393/500 kBProgress (2): 522/621 kB |
393/500 kBProgress (2): 526/621 kB | 393/500 kBProgress (2): 530/621 kB | 393/500 kBProgress (2): 534/621 kB | 393/500 kBProgress (2): 538/621 kB | 393/500 kBProgress (2): 542/621 kB | 393/500 kB
Progress (2): 546/621 kB | 393/500 kBProgress (2): 550/621 kB | 393/500 kBProgress (2): 554/621 kB | 393/500 kBProgress (2): 558/621 kB | 393/500 kBProgress (2): 562/621 kB | 393/500 kBProgress (2):
567/621 kB | 393/500 kBProgress (2): 571/621 kB | 393/500 kBProgress (2): 575/621 kB | 393/500 kBProgress (2): 579/621 kB | 393/500 kBProgress (2): 583/621 kB | 393/500 kBProgress (2): 587/621 kB |
393/500 kBProgress (2): 591/621 kB | 393/500 kBProgress (2): 595/621 kB | 393/500 kBProgress (2): 599/621 kB | 393/500 kBProgress (2): 599/621 kB | 397/500 kBProgress (2): 599/621 kB | 401/500 kB
Progress (2): 599/621 kB | 406/500 kBProgress (2): 599/621 kB | 410/500 kBProgress (2): 599/621 kB | 414/500 kBProgress (2): 599/621 kB | 418/500 kBProgress (2): 599/621 kB | 422/500 kBProgress (2):
599/621 kB | 426/500 kBProgress (2): 599/621 kB | 430/500 kBProgress (2): 599/621 kB | 434/500 kBProgress (2): 599/621 kB | 438/500 kBProgress (2): 599/621 kB | 442/500 kBProgress (2): 599/621 kB |
446/500 kBProgress (2): 599/621 kB | 451/500 kBProgress (2): 599/621 kB | 455/500 kBProgress (2): 599/621 kB | 459/500 kBProgress (2): 599/621 kB | 463/500 kBProgress (2): 599/621 kB | 467/500 kB
Progress (2): 599/621 kB | 471/500 kBProgress (2): 599/621 kB | 475/500 kBProgress (2): 599/621 kB | 479/500 kBProgress (2): 599/621 kB | 483/500 kBProgress (2): 599/621 kB | 487/500 kBProgress (2):
599/621 kB | 492/500 kBProgress (2): 599/621 kB | 496/500 kBProgress (2): 599/621 kB | 500 kB    Progress (2): 603/621 kB | 500 kBProgress (2): 608/621 kB | 500 kBProgress (2): 612/621 kB | 500 kB
Progress (2): 616/621 kB | 500 kBProgress (2): 620/621 kB | 500 kBProgress (2): 621 kB | 500 kB                                Downloaded: https://repo.maven.apache.org/maven2/com/thoughtworks/xstream
/xstream/1.4.11.1/xstream-1.4.11.1.jar (621 kB at 1.3 MB/s)
247 Downloaded: https://repo.maven.apache.org/maven2/org/apache/commons/commons-lang3/3.7/commons-lang3-3.7.jar (500 kB at 1.0 MB/s)
248 [INFO] No artifact parameter specified, using 'com.mycompany.app:my-app:jar:1.0-SNAPSHOT' as project.
249 [INFO]
250 my-app
251 [INFO] ------------------------------------------------------------------------
252 [INFO] BUILD SUCCESS
253 [INFO] ------------------------------------------------------------------------
254 [INFO] Total time: 5.975 s
255 [INFO] Finished at: 2020-10-20T18:54:27Z
256 [INFO] Final Memory: 15M/36M
257 [INFO] ------------------------------------------------------------------------
258 + set +x
259 The following complex command extracts the value of the <name/> element
260 within <project/> of your Java/Maven projects "pom.xml" file.
261 ++ grep '^[^\[]'
262 ++ mvn help:evaluate -Dexpression=project.name
263 + NAME=my-app
264 + set +x
265 The following complex command behaves similarly to the previous one but
266 extracts the value of the <version/> element within <project/> instead.
267 ++ grep '^[^\[]'
268 ++ mvn help:evaluate -Dexpression=project.version
269 + VERSION=1.0-SNAPSHOT
270 + set +x
271 The following command runs and outputs the execution of your Java
272 application (which Jenkins built using Maven) to the Jenkins UI.
273 + java -jar target/my-app-1.0-SNAPSHOT.jar
274 Hello World!
```

1st AWS S3 Bucket with uploaded .jar file



Delivery of App to AWS S3 Bucket is done ☺

by Oleksandr Chanov