COMP.SE.140-2025-2026-1-TAU

Continuous Development and Deployment – DevOps

Exercise 2 – Building a pipeline

Tuukka Salonen

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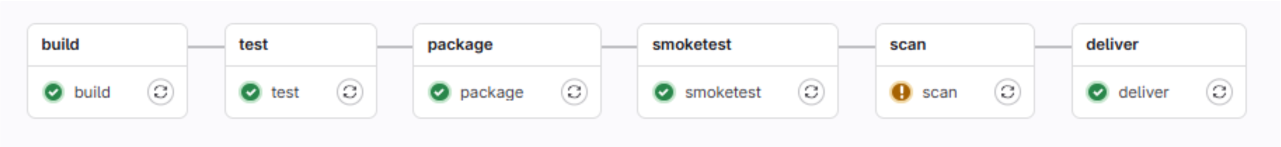
## Error report



The Trivy scan stage had errors as vulnerabilities were found. I set the stage to allow failure in this case as the image was required to be pushed to Harbor. In a real production pipeline that would not be set. I included the test and smoketest scripts as they are in separate files. In GitLab, the test results for test and smoketest stages are put in artifacts where payload, expected result and response are logged.

# 1. Test scripts

## 1.1 Test script

```
#!/bin/sh

# Simple test script for the Java server

set -e  # Exit if fail

# Variables
TEST_REPORT="test-report.txt"
PAYLOAD='{ "numbers": [2, 3, 7, 8] }' # Test payload
EXPECTED_RESULT=5
URL="http://localhost:8119"
```

```

echo "Running API test..." > "$TEST_REPORT"

# Send test request
RESPONSE=$(curl -s -X POST \
  -H "Content-Type: application/json" \
  -H "Accept: text/plain" \
  -d "$PAYLOAD" \
  "$URL")

# Write results to report
echo "Payload: $PAYLOAD" >> "$TEST_REPORT"
echo "Expected result: $EXPECTED_RESULT" >> "$TEST_REPORT"
echo "Response: $RESPONSE" >> "$TEST_REPORT"

# Validate results and write status to report
if [ "$RESPONSE" -eq "$EXPECTED_RESULT" ]; then
  echo "Status: Test passed" >> "$TEST_REPORT"
else
  echo "Status: Test failed" >> "$TEST_REPORT"
  exit 1
fi
```

## 1.2 Smoketest script

```
#!/bin/sh

# Smoketest script for the Java server in Docker

set -e  # Exit if fail

# Variables
IMAGE_FILE="java-server.tar.gz"
CONTAINER_NAME="java-server-test"
PORT=8119
URL="http://localhost:$PORT"
PAYLOAD='{ "numbers": [2, 2] }' # Test payload
EXPECTED=2
REPORT="smoketest-report.txt"
MAX_RETRIES=20
WAIT_SECONDS=2

echo "Running smoke test..." > "$REPORT"

echo "Loading Docker image from $IMAGE_FILE..."
gunzip -c "$IMAGE_FILE" | docker load

echo "Starting container $CONTAINER_NAME..."
docker run -d -p "$PORT:$PORT" --name "$CONTAINER_NAME" java-server

# Wait for the server to start and send test request
echo "Waiting for server to respond..."
for i in $(seq 1 "$MAX_RETRIES"); do
  RESPONSE=$(docker exec "$CONTAINER_NAME" curl -s -X POST \
    -H "Content-Type: application/json" \
    -H "Accept: text/plain" \
    -d "$PAYLOAD" \
    "$URL" || true)

  if [ -n "$RESPONSE" ]; then
    echo "Server responded after $i attempts."
    break
  fi

  echo "[$i/$MAX_RETRIES] Server not ready, retrying in $WAIT_SECONDS seconds..."
  sleep "$WAIT_SECONDS"
done

# Write results to report
```

```
echo "Payload: $PAYLOAD" >> "$REPORT"
echo "Expected result: $EXPECTED" >> "$REPORT"
echo "Response: $RESPONSE" >> "$REPORT"

# Validate results and write status to report
if [ "$RESPONSE" = "$EXPECTED" ]; then
  echo "Status: PASS" >> "$REPORT"
  STATUS=0
else
  echo "Status: FAIL" >> "$REPORT"
  # Write container logs in addition to the report if test fail
  echo "Container logs:" >> "$REPORT"
  docker logs "$CONTAINER_NAME" >> "$REPORT"
  STATUS=1
fi

echo "Stopping and removing container..."
docker stop "$CONTAINER_NAME"
docker rm "$CONTAINER_NAME"

exit "$STATUS"
```

## 2. Test error

Test log during error (set manually to fail with incorrect expected output):

```
Running with gitlab-runner 18.2.1 (cc489270)
  on gitlab-runner 5g9N4DjuD, system ID: s_a1de4ff0187a
Preparing the "docker" executor
00:03
Using Docker executor with image amazoncorretto:21-alpine3.18-jdk ...
Using effective pull policy of [always] for container amazoncorretto:21-alpine3.18-jdk
Pulling docker image amazoncorretto:21-alpine3.18-jdk ...
Using docker image sha256:cc4c010d215b7ffb024514f47135f09ae43970c288de4d142afe147f202c65a3 for amazoncorretto:21-alpine3.18-jdk with digest amazoncorretto@sha256:9dcef4ef92dc11b31a61cdfe6f3cf72c30bfbb6c7183df734e693da1a1e4c3f9 ...
Preparing environment
00:01
Using effective pull policy of [always] for container sha256:3a9fa0a34880c96b3a93a18645602cc1a1aa218de3cd76ba7c3856eb2f7d16bc
Running on runner-5g9n4djud-project-35172-concurrent-0 via gitlab-runner...
Getting source from Git repository
00:01
Gitaly correlation ID: 01K7CDWDVN1F6SHNT8W5XRFBJT
Fetching changes with git depth set to 20...
Reinitialized existing Git repository in /builds/comp-cs-140-fall2025/httusa/.git/
Created fresh repository.
Checking out f3281b73 as detached HEAD (ref is exercise2)...
Removing build/
Skipping Git submodules setup
Downloading artifacts
00:01
Downloading artifacts for build (225524)...
Downloading artifacts from coordinator... ok        correlation_id=01K7CDWKQYJMCV1BW41PCA7C3F host=course-gitlab.tuni.fi id=225524 responseStatus=200 OK token=eyJraWQiO
Executing "step_script" stage of the job script
00:07
Using effective pull policy of [always] for container amazoncorretto:21-alpine3.18-jdk
Using docker image sha256:cc4c010d215b7ffb024514f47135f09ae43970c288de4d142afe147f202c65a3 for amazoncorretto:21-alpine3.18-jdk with digest amazoncorretto@sha256:9dcef4ef92dc11b31a61cdfe6f3cf72c30bfbb6c7183df734e693da1a1e4c3f9 ...
$ echo "Running tests"
Running tests
$ apk add --no-cache curl
fetch https://dl-cdn.alpinelinux.org/alpine/v3.18/main/x86_64/APKINDEX.tar.gz
fetch https://dl-cdn.alpinelinux.org/alpine/v3.18/community/x86_64/APKINDEX.tar.gz
fetch https://apk.corretto.aws/x86_64/APKINDEX.tar.gz
(1/8) Installing ca-certificates (20241121-r1)
(2/8) Installing brotli-libs (1.0.9-r14)
```

```
38. (3/8) Installing libunistring (1.1-r1)
39. (4/8) Installing libidn2 (2.3.4-r1)
40. (5/8) Installing nghttp2-libs (1.57.0-r0)
41. (6/8) Installing libpsl (0.21.5-r0)
42. (7/8) Installing libcurl (8.12.1-r0)
43. (8/8) Installing curl (8.12.1-r0)
44. Executing busybox-1.36.1-r7.trigger
45. Executing ca-certificates-20241121-r1.trigger
46. OK: 359 MiB in 25 packages
47. $ java -cp build:lib/json.jar Server &
48. $ SERVER_PID=$!
49. $ sleep 5
50. Server listening on http://localhost:8119
51. $ chmod +x scripts/test.sh
52. $ ./scripts/test.sh
53. Uploading artifacts for failed job
54. 00:01
55. Uploading artifacts...
56. test-report.txt: found 1 matching artifact files and directories
57. Uploading artifacts as "archive" to coordinator... 201 Created
correlation_id=01K7CDWVKN94842RGG41VZZB2G id=225525 responseStatus=201 Created token=eyJraWQiO
58. Cleaning up project directory and file based variables
59. 00:00
60. ERROR: Job failed: exit code 1
```

## 3. Successful test

Successful test log:

```
 1. Running with gitlab-runner 18.2.1 (cc489270) on gitlab-runner 5g9N4DjuD, system ID: s_a1de4ff0187a
 3. Preparing the "docker" executor
 4. 00:04
 5. Using Docker executor with image amazoncorretto:21-alpine3.18-jdk ...
 6. Using effective pull policy of [always] for container amazoncorretto:21-alpine3.18-jdk
 7. Pulling docker image amazoncorretto:21-alpine3.18-jdk ...
 8. Using docker image sha256:cc4c010d215b7ffb024514f47135f09ae43970c288de4d142afe147f202c65a3 for
amazoncorretto:21-alpine3.18-jdk with digest
amazoncorretto@sha256:9dcef4ef92dc11b31a61cdfe6f3cf72c30bfbb6c7183df734e693da1a1e4c3f9 ...
 9. Preparing environment
10. 00:00
11. Using effective pull policy of [always] for container
sha256:3a9fa0a34880c96b3a93a18645602cc1a1aa218de3cd76ba7c3856eb2f7d16bc
12. Running on runner-5g9n4djud-project-35172-concurrent-0 via gitlab-runner...
13. Getting source from Git repository
14. 00:01
15. Gitaly correlation ID: 01K7CBQW22MZP5HVQ099JF1CYE
16. Fetching changes with git depth set to 20...
17. Reinitialized existing Git repository in /builds/comp-cs-140-fall2025/httusa/.git/
18. Created fresh repository.
19. Checking out 20100b8a as detached HEAD (ref is exercise2)...
20. Removing build/
21. Removing java-server.tar.gz
22. Removing smoketest-report.txt
23. Removing test-report.txt
24. Removing trivy-report.json
25. Skipping Git submodules setup
26. Downloading artifacts
27. 00:01
28. Downloading artifacts for build (225511)...
29. Downloading artifacts from coordinator... ok        correlation_id=01K7CBR1H4KKSKYVYQ6115THNN
host=course-gitlab.tuni.fi id=225511 responseStatus=200 OK token=eyJraWQiO
30. Executing "step_script" stage of the job script
31. 00:07
32. Using effective pull policy of [always] for container amazoncorretto:21-alpine3.18-jdk
33. Using docker image sha256:cc4c010d215b7ffb024514f47135f09ae43970c288de4d142afe147f202c65a3 for
amazoncorretto:21-alpine3.18-jdk with digest
amazoncorretto@sha256:9dcef4ef92dc11b31a61cdfe6f3cf72c30bfbb6c7183df734e693da1a1e4c3f9 ...
34. $ echo "Running tests"
35. Running tests
```

```
$ apk add --no-cache curl
fetch https://dl-cdn.alpinelinux.org/alpine/v3.18/main/x86_64/APKINDEX.tar.gz
fetch https://dl-cdn.alpinelinux.org/alpine/v3.18/community/x86_64/APKINDEX.tar.gz
fetch https://apk.corretto.aws/x86_64/APKINDEX.tar.gz
(1/8) Installing ca-certificates (20241121-r1)
(2/8) Installing brotli-libs (1.0.9-r14)
(3/8) Installing libunistring (1.1-r1)
(4/8) Installing libidn2 (2.3.4-r1)
(5/8) Installing nghttp2-libs (1.57.0-r0)
(6/8) Installing libpsl (0.21.5-r0)
(7/8) Installing libcurl (8.12.1-r0)
(8/8) Installing curl (8.12.1-r0)
Executing busybox-1.36.1-r7.trigger
Executing ca-certificates-20241121-r1.trigger
OK: 359 MiB in 25 packages
$ java -cp build:lib/json.jar Server &
$ SERVER_PID=$!
$ sleep 5
Server listening on http://localhost:8119
$ chmod +x scripts/test.sh
$ ./scripts/test.sh
$ kill $SERVER_PID
Uploading artifacts for successful job
00:01
Uploading artifacts...
test-report.txt: found 1 matching artifact files and directories
Uploading artifacts as "archive" to coordinator... 201 Created
correlation_id=01K7CBR9DQHJ4X5XDYZ2QXVVYA id=225512 responseStatus=201 Created token=eyJraWQiO
Cleaning up project directory and file based variables
00:00
Job succeeded
```

## 4. Container run and successful smoketest

Log of run execution and smoketest in container. Smoketest script can be found at section 1 of this report.

```
Running with gitlab-runner 18.2.1 (cc489270)
  on gitlab-runner 5g9N4DjuD, system ID: s_a1de4ff0187a
Preparing the "docker" executor
00:09
Using Docker executor with image docker:24 ...
Starting service docker:dind...
Using effective pull policy of [always] for container docker:dind
Pulling docker image docker:dind ...
Using docker image sha256:0c6e741a59d2b5a4679660c106679ebc7d4db788ddc56ff5e6741120cb5615ee for
docker:dind with digest docker@sha256:24173119fa6d1b5b4a27ab164fa7863deb66574ee5b90fef3b85dc888ef1a7e6
...
Waiting for services to be up and running (timeout 30 seconds)...
Using effective pull policy of [always] for container docker:24
Pulling docker image docker:24 ...
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for
docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e
...
Preparing environment
00:00
Using effective pull policy of [always] for container
sha256:3a9fa0a34880c96b3a93a18645602cc1a1aa218de3cd76ba7c3856eb2f7d16bc
Running on runner-5g9n4djud-project-35172-concurrent-0 via gitlab-runner...
Getting source from Git repository
00:01
Gitaly correlation ID: 01K7CBSPDWXTHVP7Q4V55WGV7G
Fetching changes with git depth set to 20...
Reinitialized existing Git repository in /builds/comp-cs-140-fall2025/httusa/.git/
Created fresh repository.
Checking out 20100b8a as detached HEAD (ref is exercise2)...
Removing build/
```

```
Removing java-server.tar.gz
Removing test-report.txt
Skipping Git submodules setup
Downloading artifacts
00:03
Downloading artifacts for test (225512)...
Downloading artifacts from coordinator... ok        correlation_id=01K7CBT16N3PSAECW9Y57EAC2D
host=course-gitlab.tuni.fi id=225512 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for build (225511)...
Downloading artifacts from coordinator... ok        correlation_id=01K7CBT1BZ2FGZTW0M0EQSGKBR
host=course-gitlab.tuni.fi id=225511 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for package (225513)...
Downloading artifacts from coordinator... ok        correlation_id=01K7CBT1HEN5PP0FES9R0834B6
host=course-gitlab.tuni.fi id=225513 responseStatus=200 OK token=eyJraWQiO
Executing "step_script" stage of the job script
00:15
Using effective pull policy of [always] for container docker:24
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for
docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e
...
$ apk add --no-cache docker curl
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/main/x86_64/APKINDEX.tar.gz
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/community/x86_64/APKINDEX.tar.gz
(1/10) Upgrading libcurl (8.9.0-r0 -> 8.14.1-r2)
(2/10) Installing curl (8.14.1-r2)
(3/10) Installing libseccomp (2.5.5-r1)
(4/10) Installing runc (1.1.14-r0)
(5/10) Installing containerd (1.7.17-r2)
(6/10) Installing tini-static (0.19.0-r3)
(7/10) Installing docker-engine (26.1.5-r0)
Executing docker-engine-26.1.5-r0.pre-install
(8/10) Installing docker-cli (26.1.5-r0)
(9/10) Installing docker-cli-buildx (0.14.0-r3)
(10/10) Installing docker (26.1.5-r0)
Executing busybox-1.36.1-r29.trigger
OK: 312 MiB in 82 packages
$ chmod +x scripts/smoketest.sh
$ ./scripts/smoketest.sh
Loading Docker image from java-server.tar.gz...
Loaded image: java-server:latest
Starting container java-server-test...
d0ee350a5ba95e124181b91631ba5432dcbcfa596d1eaa627427046ba3cfe8fb
Waiting for server to respond...
[1/20] Server not ready, retrying in 2 seconds...
Server responded after 2 attempts.
Stopping and removing container...
java-server-test
java-server-test
Uploading artifacts for successful job
00:00
Uploading artifacts...
smoketest-report.txt: found 1 matching artifact files and directories
Uploading artifacts as "archive" to coordinator... 201 Created
correlation_id=01K7CBTJ2HMX1K8VG1ZN81R6QY id=225514 responseStatus=201 Created token=eyJraWQiO
Cleaning up project directory and file based variables
00:01
Job succeeded
```

## 5. Scan

Here is the complete log of the Trivy scan stage that fails due to vulnerabilities found:

```
Running with gitlab-runner 18.2.1 (cc489270)
on gitlab-runner 5g9N4DjuD, system ID: s_a1de4ff0187a
Preparing the "docker" executor00:09
Using Docker executor with image docker:24 ...
Starting service docker:dind...
Using effective pull policy of [always] for container docker:dind
Pulling docker image docker:dind ...
```

```
Using docker image sha256:0c6e741a59d2b5a4679660c106679ebc7d4db788ddc56ff5e6741120cb5615ee for
docker:dind with digest docker@sha256:24173119fa6d1b5b4a27ab164fa7863deb66574ee5b90fef3b85dc888ef1a7e6
...
Waiting for services to be up and running (timeout 30 seconds)...
Using effective pull policy of [always] for container docker:24
Pulling docker image docker:24 ...
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for
docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e
...
Preparing environment00:01
Using effective pull policy of [always] for container
sha256:3a9fa0a34880c96b3a93a18645602cc1a1aa218de3cd76ba7c3856eb2f7d16bc
Running on runner-5g9n4djud-project-35172-concurrent-0 via gitlab-runner...
Getting source from Git repository00:02
Gitaly correlation ID: 01K7CC3FMJRXZWGEFWWD7G6G0T
Fetching changes with git depth set to 20...
Reinitialized existing Git repository in /builds/comp-cs-140-fall2025/httusa/.git/
Created fresh repository.
Checking out 5e436fde as detached HEAD (ref is deliver)...
Removing build/
Removing java-server.tar.gz
Removing smoketest-report.txt
Removing test-report.txt
Skipping Git submodules setup
Downloading artifacts00:05
Downloading artifacts for test (225517)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC3VX644W7T9QTDSA1HXK0 host=course-
gitlab.tuni.fi id=225517 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for smoketest (225519)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC3W2MQBMEXR221TM4H4J0 host=course-
gitlab.tuni.fi id=225519 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for build (225516)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC3W7X5MFF0Y45HX0MSTZ9 host=course-
gitlab.tuni.fi id=225516 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for package (225518)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC3WDCVA05GGQK36Z46EE7 host=course-
gitlab.tuni.fi id=225518 responseStatus=200 OK token=eyJraWQiO
Executing "step_script" stage of the job script01:30
Using effective pull policy of [always] for container docker:24
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for
docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e
...
$ echo "Scanning Docker image"
Scanning Docker image
$ apk add --no-cache curl
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/main/x86_64/APKINDEX.tar.gz
fetch https://dl-cdn.alpinelinux.org/alpine/v3.20/community/x86_64/APKINDEX.tar.gz
(1/2) Upgrading libcurl (8.9.0-r0 -> 8.14.1-r2)
(2/2) Installing curl (8.14.1-r2)
Executing busybox-1.36.1-r29.trigger
OK: 43 MiB in 74 packages
$ curl -sfL https://raw.githubusercontent.com/aquasecurity/trivy/main/contrib/install.sh | sh -s --
-b /usr/local/bin v0.66.0
aquasecurity/trivy info checking GitHub for tag 'v0.66.0'
aquasecurity/trivy info found version: 0.66.0 for v0.66.0/Linux/64bit
aquasecurity/trivy info installed /usr/local/bin/trivy
$ gunzip -c java-server.tar.gz | docker load
Loaded image: java-server:latest
$ trivy image --severity HIGH,CRITICAL --exit-code 1 --format json -o trivy-report.json java-server
2025-10-12T14:10:30Z INFO [vulndb] Need to update DB
2025-10-12T14:10:30Z INFO [vulndb] Downloading vulnerability DB...
2025-10-12T14:10:30Z INFO [vulndb] Downloading artifact... repo="mirror.gcr.io/aquasec/trivy-db:2"
1.70 MiB / 72.58 MiB [->___________________________________________________________] 2.35% ? p/s
?17.60 MiB / 72.58 MiB [------------->_____________________________________________] 24.26% ? p/s
?39.64 MiB / 72.58 MiB [-------------------------------->__________________________] 54.61% ? p/s
?61.64 MiB / 72.58 MiB [--------------------------------------->_______] 84.93% 99.97 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [-------------------------------------------->] 100.00% 99.97 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [-------------------------------------------->] 100.00% 99.97 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [-------------------------------------------->] 100.00% 94.69 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [-------------------------------------------->] 100.00% 94.69 MiB p/s ETA
```

```
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 94.69 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 88.58 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 88.58 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 88.58 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 82.87 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 82.87 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 82.87 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 77.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 77.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 77.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 72.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 72.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 72.52 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 67.84 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 67.84 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 67.84 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 63.46 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 63.46 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 63.46 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [---------------------------------------------->] 100.00% 59.37 MiB p/s ETA
0s72.58 MiB / 72.58 MiB [-------------------------------------------------] 100.00% 13.13 MiB p/s
5.7s2025-10-12T14:10:37Z INFO [vulndb] Artifact successfully downloaded
repo="mirror.gcr.io/aquasec/trivy-db:2"
59. 2025-10-12T14:10:37Z INFO [vuln] Vulnerability scanning is enabled
60. 2025-10-12T14:10:37Z INFO [secret] Secret scanning is enabled
61. 2025-10-12T14:10:37Z INFO [secret] If your scanning is slow, please try '--scanners vuln' to
disable secret scanning
62. 2025-10-12T14:10:37Z INFO [secret] Please see
https://trivy.dev/v0.66/docs/scanner/secret#recommendation for faster secret detection
63. 2025-10-12T14:10:46Z INFO [javadb] Downloading Java DB...
64. 2025-10-12T14:10:46Z INFO [javadb] Downloading artifact... repo="mirror.gcr.io/aquasec/trivy-java-
db:1"
65. 2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?2.89 MiB / 785.11 MiB [>_____________________________________________________________] 0.37% ? p/s
?4.12 MiB / 785.11 MiB [>______________________________________________] 0.53% 2.06 MiB p/s ETA
6m20s5.67 MiB / 785.11 MiB [>______________________________________________] 0.72% 2.06 MiB p/s ETA
6m19s5.77 MiB / 785.11 MiB [>______________________________________________] 0.73% 2.06 MiB p/s ETA
6m19s19.56 MiB / 785.11 MiB [->____________________________________________] 2.49% 3.58 MiB p/s ETA
3m33s30.80 MiB / 785.11 MiB [->____________________________________________] 3.92% 3.58 MiB p/s ETA
3m30s30.80 MiB / 785.11 MiB [->____________________________________________] 3.92% 3.58 MiB p/s ETA
3m30s30.81 MiB / 785.11 MiB [->____________________________________________] 3.92% 4.56 MiB p/s ETA
2m45s30.81 MiB / 785.11 MiB [->____________________________________________] 3.92% 4.56 MiB p/s ETA
2m45s30.81 MiB / 785.11 MiB [->____________________________________________] 3.92% 4.56 MiB p/s ETA
2m45s31.69 MiB / 785.11 MiB [->____________________________________________] 4.04% 4.36 MiB p/s ETA
2m52s37.09 MiB / 785.11 MiB [-->___________________________________________] 4.72% 4.36 MiB p/s ETA
2m51s38.17 MiB / 785.11 MiB [-->___________________________________________] 4.86% 4.36 MiB p/s ETA
2m51s41.31 MiB / 785.11 MiB [-->___________________________________________] 5.26% 5.12 MiB p/s ETA
2m25s53.34 MiB / 785.11 MiB [--->__________________________________________] 6.79% 5.12 MiB p/s ETA
2m23s64.73 MiB / 785.11 MiB [--->__________________________________________] 8.25% 5.12 MiB p/s ETA
2m20s76.09 MiB / 785.11 MiB [---->_________________________________________] 9.69% 8.53 MiB p/s ETA
1m23s87.72 MiB / 785.11 MiB [----->_______________________________________] 11.17% 8.53 MiB p/s ETA
1m21s99.33 MiB / 785.11 MiB [----->_______________________________________] 12.65% 8.53 MiB p/s ETA
1m20s110.58 MiB / 785.11 MiB [------>______________________________________] 14.08% 11.68 MiB p/s ETA
57s121.86 MiB / 785.11 MiB [------>______________________________________] 15.52% 11.68 MiB p/s ETA
56s133.50 MiB / 785.11 MiB [------->_____________________________________] 17.00% 11.68 MiB p/s ETA
55s145.11 MiB / 785.11 MiB [-------->____________________________________] 18.48% 14.64 MiB p/s ETA
43s147.47 MiB / 785.11 MiB [-------->____________________________________] 18.78% 14.64 MiB p/s ETA
43s147.47 MiB / 785.11 MiB [-------->____________________________________] 18.78% 14.64 MiB p/s ETA
43s147.47 MiB / 785.11 MiB [-------->____________________________________] 18.78% 13.95 MiB p/s ETA
45s147.47 MiB / 785.11 MiB [-------->____________________________________] 18.78% 13.95 MiB p/s ETA
45s147.47 MiB / 785.11 MiB [-------->____________________________________] 18.78% 13.95 MiB p/s ETA
45s148.03 MiB / 785.11 MiB [-------->____________________________________] 18.85% 13.11 MiB p/s ETA
48s148.08 MiB / 785.11 MiB [-------->____________________________________] 18.86% 13.11 MiB p/s ETA
48s149.41 MiB / 785.11 MiB [-------->____________________________________] 19.03% 13.11 MiB p/s ETA
48s149.41 MiB / 785.11 MiB [-------->____________________________________] 19.03% 12.41 MiB p/s ETA
51s150.87 MiB / 785.11 MiB [-------->____________________________________] 19.22% 12.41 MiB p/s ETA
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51s150.87 MiB / 785.11 MiB [-------->____________________________________] 19.22% 12.41 MiB p/s ETA
51s152.86 MiB / 785.11 MiB [-------->____________________________________] 19.47% 11.98 MiB p/s ETA
52s155.97 MiB / 785.11 MiB [-------->____________________________________] 19.87% 11.98 MiB p/s ETA
52s169.53 MiB / 785.11 MiB [--------->___________________________________] 21.59% 11.98 MiB p/s ETA
51s186.48 MiB / 785.11 MiB [---------->__________________________________] 23.75% 14.83 MiB p/s ETA
40s206.55 MiB / 785.11 MiB [----------->_________________________________] 26.31% 14.83 MiB p/s ETA
39s219.05 MiB / 785.11 MiB [------------>________________________________] 27.90% 14.83 MiB p/s ETA
38s235.79 MiB / 785.11 MiB [------------->_______________________________] 30.03% 19.18 MiB p/s ETA
28s237.99 MiB / 785.11 MiB [------------->_______________________________] 30.31% 19.18 MiB p/s ETA
28s239.83 MiB / 785.11 MiB [------------->_______________________________] 30.55% 19.18 MiB p/s ETA
28s255.98 MiB / 785.11 MiB [-------------->______________________________] 32.60% 20.11 MiB p/s ETA
26s268.73 MiB / 785.11 MiB [--------------->_____________________________] 34.23% 20.11 MiB p/s ETA
25s284.42 MiB / 785.11 MiB [---------------->____________________________] 36.23% 20.11 MiB p/s ETA
24s300.89 MiB / 785.11 MiB [----------------->___________________________] 38.32% 23.64 MiB p/s ETA
20s317.98 MiB / 785.11 MiB [------------------>__________________________] 40.50% 23.64 MiB p/s ETA
19s334.08 MiB / 785.11 MiB [------------------->_________________________] 42.55% 23.64 MiB p/s ETA
19s338.70 MiB / 785.11 MiB [------------------->_________________________] 43.14% 26.18 MiB p/s ETA
17s339.55 MiB / 785.11 MiB [------------------->_________________________] 43.25% 26.18 MiB p/s ETA
17s339.55 MiB / 785.11 MiB [------------------->_________________________] 43.25% 26.18 MiB p/s ETA
17s339.55 MiB / 785.11 MiB [------------------->_________________________] 43.25% 24.58 MiB p/s ETA
18s339.55 MiB / 785.11 MiB [------------------->_________________________] 43.25% 24.58 MiB p/s ETA
18s352.17 MiB / 785.11 MiB [-------------------->________________________] 44.86% 24.58 MiB p/s ETA
17s368.05 MiB / 785.11 MiB [--------------------->_______________________] 46.88% 26.06 MiB p/s ETA
16s384.62 MiB / 785.11 MiB [---------------------->______________________] 48.99% 26.06 MiB p/s ETA
15s402.91 MiB / 785.11 MiB [----------------------->_____________________] 51.32% 26.06 MiB p/s ETA
14s417.39 MiB / 785.11 MiB [----------------------->_____________________] 53.16% 29.68 MiB p/s ETA
12s432.50 MiB / 785.11 MiB [------------------------>____________________] 55.09% 29.68 MiB p/s ETA
11s451.50 MiB / 785.11 MiB [------------------------->___________________] 57.51% 29.68 MiB p/s ETA
11s471.98 MiB / 785.11 MiB [--------------------------->__________________] 60.12% 33.64 MiB p/s ETA
9s492.83 MiB / 785.11 MiB [---------------------------->_________________] 62.77% 33.64 MiB p/s ETA
8s511.30 MiB / 785.11 MiB [----------------------------->________________] 65.12% 33.64 MiB p/s ETA
8s517.27 MiB / 785.11 MiB [------------------------------>_______________] 65.88% 36.34 MiB p/s ETA
7s517.27 MiB / 785.11 MiB [------------------------------>_______________] 65.88% 36.34 MiB p/s ETA
7s517.31 MiB / 785.11 MiB [------------------------------>_______________] 65.89% 36.34 MiB p/s ETA
7s517.31 MiB / 785.11 MiB [------------------------------>_______________] 65.89% 34.00 MiB p/s ETA
7s517.31 MiB / 785.11 MiB [------------------------------>_______________] 65.89% 34.00 MiB p/s ETA
7s527.56 MiB / 785.11 MiB [------------------------------>_______________] 67.20% 34.00 MiB p/s ETA
7s534.95 MiB / 785.11 MiB [------------------------------->______________] 68.14% 33.71 MiB p/s ETA
7s534.95 MiB / 785.11 MiB [------------------------------->______________] 68.14% 33.71 MiB p/s ETA
7s535.72 MiB / 785.11 MiB [------------------------------->______________] 68.23% 33.71 MiB p/s ETA
7s535.72 MiB / 785.11 MiB [------------------------------->______________] 68.23% 31.61 MiB p/s ETA
7s536.14 MiB / 785.11 MiB [------------------------------->______________] 68.29% 31.61 MiB p/s ETA
7s536.14 MiB / 785.11 MiB [------------------------------->______________] 68.29% 31.61 MiB p/s ETA
7s540.04 MiB / 785.11 MiB [------------------------------->______________] 68.79% 30.04 MiB p/s ETA
8s544.87 MiB / 785.11 MiB [------------------------------->______________] 69.40% 30.04 MiB p/s ETA
7s545.59 MiB / 785.11 MiB [------------------------------->______________] 69.49% 30.04 MiB p/s ETA
7s545.59 MiB / 785.11 MiB [------------------------------->______________] 69.49% 28.70 MiB p/s ETA
8s545.64 MiB / 785.11 MiB [------------------------------->______________] 69.50% 28.70 MiB p/s ETA
8s545.64 MiB / 785.11 MiB [------------------------------->______________] 69.50% 28.70 MiB p/s ETA
8s545.64 MiB / 785.11 MiB [------------------------------->______________] 69.50% 26.85 MiB p/s ETA
8s546.72 MiB / 785.11 MiB [-------------------------------->_____________] 69.64% 26.85 MiB p/s ETA
8s546.72 MiB / 785.11 MiB [-------------------------------->_____________] 69.64% 26.85 MiB p/s ETA
8s546.75 MiB / 785.11 MiB [-------------------------------->_____________] 69.64% 25.24 MiB p/s ETA
9s550.59 MiB / 785.11 MiB [-------------------------------->_____________] 70.13% 25.24 MiB p/s ETA
9s556.36 MiB / 785.11 MiB [-------------------------------->_____________] 70.86% 25.24 MiB p/s ETA
9s576.95 MiB / 785.11 MiB [--------------------------------->____________] 73.49% 26.86 MiB p/s ETA
7s594.50 MiB / 785.11 MiB [---------------------------------->___________] 75.72% 26.86 MiB p/s ETA
7s610.60 MiB / 785.11 MiB [----------------------------------->__________] 77.77% 26.86 MiB p/s ETA
6s626.70 MiB / 785.11 MiB [------------------------------------>_________] 79.82% 30.48 MiB p/s ETA
5s641.16 MiB / 785.11 MiB [------------------------------------->________] 81.66% 30.48 MiB p/s ETA
4s657.17 MiB / 785.11 MiB [-------------------------------------->_______] 83.70% 30.48 MiB p/s ETA
4s674.72 MiB / 785.11 MiB [--------------------------------------->______] 85.94% 33.68 MiB p/s ETA
3s676.20 MiB / 785.11 MiB [--------------------------------------->______] 86.13% 33.68 MiB p/s ETA
3s676.59 MiB / 785.11 MiB [--------------------------------------->______] 86.18% 33.68 MiB p/s ETA
3s677.03 MiB / 785.11 MiB [--------------------------------------->______] 86.23% 31.75 MiB p/s ETA
3s677.03 MiB / 785.11 MiB [--------------------------------------->______] 86.23% 31.75 MiB p/s ETA
3s677.03 MiB / 785.11 MiB [--------------------------------------->______] 86.23% 31.75 MiB p/s ETA
3s685.34 MiB / 785.11 MiB [---------------------------------------->_____] 87.29% 30.60 MiB p/s ETA
3s699.49 MiB / 785.11 MiB [---------------------------------------->_____] 89.09% 30.60 MiB p/s ETA
2s716.20 MiB / 785.11 MiB [----------------------------------------->____] 91.22% 30.60 MiB p/s ETA
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2s734.28 MiB / 785.11 MiB [------------------------------------------->__] 93.53% 33.89 MiB p/s ETA
1s754.22 MiB / 785.11 MiB [-------------------------------------------->_] 96.07% 33.89 MiB p/s ETA
0s775.11 MiB / 785.11 MiB [--------------------------------------------->] 98.73% 33.89 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 37.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 37.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 37.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 34.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 34.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 34.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 32.52 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 32.52 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 32.52 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 30.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 30.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 30.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 28.46 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 28.46 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 28.46 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 26.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 26.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 26.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 24.91 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 24.91 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 24.91 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 23.30 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 23.30 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 23.30 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 21.80 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 21.80 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 21.80 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 20.39 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 20.39 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 20.39 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 19.07 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 19.07 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 19.07 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 17.84 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 17.84 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 17.84 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 16.69 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 16.69 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 16.69 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 15.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 15.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 15.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 14.61 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 14.61 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 14.61 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 13.67 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 13.67 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 13.67 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 12.78 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 12.78 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 12.78 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.96 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.96 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.96 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.19 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.19 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 11.19 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 10.47 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 10.47 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 10.47 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.79 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.79 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.79 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 9.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.57 MiB p/s ETA
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0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.57 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.57 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.02 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.02 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 8.02 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.50 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.50 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.50 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 7.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.56 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.56 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.56 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.14 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.14 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 6.14 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.74 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.74 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.74 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.03 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.03 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 5.03 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.70 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.70 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.70 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.40 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.40 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.40 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 4.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.85 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.85 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.85 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.60 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.60 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.60 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.37 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.15 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.15 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 3.15 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.95 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.95 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.95 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.76 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.58 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.58 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.58 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.41 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.41 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.41 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.26 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.26 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.26 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 2.11 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 1.98 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 1.98 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 1.98 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 1.85 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [--------------------------------------------->] 100.00% 1.85 MiB p/s ETA
```

```
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.85 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.73 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.73 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.73 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.62 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.51 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.51 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.51 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.42 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.32 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.32 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.32 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.24 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.24 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.24 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.16 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.08 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.08 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.08 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [-------------------------------------------->] 100.00% 1.01 MiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 971.38 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 971.38 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 971.38 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 908.71 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 908.71 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 908.71 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 850.09 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 850.09 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 850.09 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 795.24 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 795.24 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 795.24 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 743.94 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [------------------------------------------>] 100.00% 743.94 KiB p/s ETA
0s785.11 MiB / 785.11 MiB [-----------------------------------------------] 100.00% 13.57 MiB p/s
58s2025-10-12T14:11:45Z INFO [javadb] Artifact successfully downloaded
repo="mirror.gcr.io/aquasec/trivy-java-db:1"
66. 2025-10-12T14:11:45Z INFO [javadb] Java DB is cached for 3 days. If you want to update the database
more frequently, "trivy clean --java-db" command clears the DB cache.
67. 2025-10-12T14:11:46Z INFO Detected OS family="alpine" version="3.20.2"
68. 2025-10-12T14:11:46Z INFO [alpine] Detecting vulnerabilities... os_version="3.20" repository="3.20"
pkg_num=50
69. 2025-10-12T14:11:46Z INFO Number of language-specific files num=1
70. 2025-10-12T14:11:46Z INFO [jar] Detecting vulnerabilities...
71. 2025-10-12T14:11:46Z WARN Using severities from other vendors for some vulnerabilities. Read
https://trivy.dev/v0.66/docs/scanner/vulnerability#severity-selection for details.
72. 📣 Notices:
73. - Version 0.67.2 of Trivy is now available, current version is 0.66.0
74. To suppress version checks, run Trivy scans with the --skip-version-check flag
75. Uploading artifacts for failed job00:01
76. Uploading artifacts...
77. trivy-report.json: found 1 matching artifact files and directories
78. Uploading artifacts as "archive" to coordinator... 201 Created
correlation_id=01K7CC6RZMSH0FZV7D6TX9CF1F id=225520 responseStatus=201 Created token=eyJraWQiO
79. Cleaning up project directory and file based variables00:01
80. ERROR: Job failed: exit code 1
```

# 6. Deliver

Log of successful delivery to Harbor.

```
Running with gitlab-runner 18.2.1 (cc489270)
on gitlab-runner 5g9N4DjuD, system ID: s_a1de4ff0187a
Preparing the "docker" executor00:11
Using Docker executor with image docker:24 ...
Starting service docker:dind...
Using effective pull policy of [always] for container docker:dind
Pulling docker image docker:dind ...
Using docker image sha256:0c6e741a59d2b5a4679660c106679ebc7d4db788ddc56ff5e6741120cb5615ee for docker:dind with digest docker@sha256:24173119fa6d1b5b4a27ab164fa7863deb66574ee5b90fef3b85dc888ef1a7e6 ...
Waiting for services to be up and running (timeout 30 seconds)...
Using effective pull policy of [always] for container docker:24
Pulling docker image docker:24 ...
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e ...
Preparing environment00:00
Using effective pull policy of [always] for container sha256:3a9fa0a34880c96b3a93a18645602cc1a1aa218de3cd76ba7c3856eb2f7d16bc
Running on runner-5g9n4djud-project-35172-concurrent-0 via gitlab-runner...
Getting source from Git repository00:02
Gitaly correlation ID: 01K7CC6XJ6T6N9BG6YB5F07XV8
Fetching changes with git depth set to 20...
Reinitialized existing Git repository in /builds/comp-cs-140-fall2025/httusa/.git/
Created fresh repository.
Checking out 5e436fde as detached HEAD (ref is deliver)...
Removing build/
Removing java-server.tar.gz
Removing smoketest-report.txt
Removing test-report.txt
Removing trivy-report.json
Skipping Git submodules setup
Downloading artifacts00:05
Downloading artifacts for test (225517)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC7AE3A06AV85NGF5549ZW host=course-gitlab.tuni.fi id=225517 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for smoketest (225519)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC7AKRS9FXQX9A1YJYTW3Y host=course-gitlab.tuni.fi id=225519 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for scan (225520)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC7ASV02SBYFWGJP8XJ5HH host=course-gitlab.tuni.fi id=225520 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for build (225516)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC7AZWCWKQDFCQXAEPX6AS host=course-gitlab.tuni.fi id=225516 responseStatus=200 OK token=eyJraWQiO
Downloading artifacts for package (225518)...
Downloading artifacts from coordinator... ok correlation_id=01K7CC7B5ZTEC95PG4KFJYKGSK host=course-gitlab.tuni.fi id=225518 responseStatus=200 OK token=eyJraWQiO
Executing "step_script" stage of the job script00:15
Using effective pull policy of [always] for container docker:24
Using docker image sha256:e31dbb0fb5be21256b536b8650b8a7dc3dcf2f72167c8d486685e272df439e7a for docker:24 with digest docker@sha256:9b17a9f25adf17b88d0a013b4f00160754adf4b07ccbe9986664a49886c2c98e ...
$ echo "Pushing Docker image to Harbor"
Pushing Docker image to Harbor
$ echo "$HARBOR_PASSWORD" | docker login harbor.treok.eu -u httusa --password-stdin
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
Login Succeeded
$ gunzip -c java-server.tar.gz | docker load
Loaded image: java-server:latest
$ docker tag java-server harbor.treok.eu/devops_exercise2_httusa/java-server:latest
$ docker push harbor.treok.eu/devops_exercise2_httusa/java-server:latest
The push refers to repository [harbor.treok.eu/devops_exercise2_httusa/java-server]
```

```
72f5538ab298: Preparing
20ea61514e7a: Preparing
2c0beb959b75: Preparing
00f6de468209: Preparing
61e67853312d: Preparing
1206e1649bba: Preparing
befb1bf2e12b: Preparing
5fd6a51801a4: Preparing
78561cef0761: Preparing
1206e1649bba: Waiting
befb1bf2e12b: Waiting
5fd6a51801a4: Waiting
78561cef0761: Waiting
61e67853312d: Pushed
00f6de468209: Pushed
20ea61514e7a: Pushed
2c0beb959b75: Pushed
72f5538ab298: Pushed
1206e1649bba: Pushed
78561cef0761: Pushed
5fd6a51801a4: Pushed
befb1bf2e12b: Pushed
latest: digest: sha256:d1c196900da01ad372ed689bf6bab605a5ba5da6788069dcea3c18ce14ac7884 size: 2200
Cleaning up project directory and file based variables00:01
Job succeeded
```

## 7. Summary of difficulties and problems

Difficult was especially first when the image size problem was not figured out yet. It caused errors without knowing the reason. Also, one problem was the need to have built the image in separate stages using artifacts. I saved it as compressed .gz file to help with the size and then unzipped it in the later stages. I also had some minor problems with Harbor, as first the scanning stage failed after finding vulnerabilities and then the login credential setting did not work the first time, and I didn’t want to set the password in the file. However, I figured out the problem.