

# Udacity Cloud DevOps Project 3

Holm Hinrichs

## URLs

URL1 [GitHub]: <https://github.com/holmHin/udacityTest3>

URL2 [S3]: <http://udapeople-e09614a7-a4b5-4781-8af0-38741db0f061.s3-website.eu-central-1.amazonaws.com>

## Section 1

Please see presentation in same directory

## Section 2

### Build:

The screenshot displays a GitHub Actions workflow run interface. On the left is a sidebar with the user profile 'holmHin' and navigation links: Dashboard, Projects, Insights, Organization Settings, and Plan. The main area shows the workflow details for a commit 'cd8a96b' on the 'main' branch. The workflow status is 'adding build jobs'. The 'STEPS' tab is active, showing a list of steps: 'Spin up environment' (3s), 'Preparing environment variables' (0s), 'Checkout code' (0s), 'Restoring cache' (0s), and 'Back-end build' (38s). The 'Back-end build' step is highlighted in red, indicating a failure. The terminal output for this step shows a successful npm audit, followed by a build command that fails with TypeScript errors. The errors include 'TS1005: ',' expected.' and 'TS1128: Declaration or statement expected.' The final output shows 'Found 2 errors.' and 'npm ERR! Failed at the glee2@1.0.0 build script.'

```
26 Found 35/43 vulnerabilities (3840 low, 113 moderate, 16987 high, 3 critical)
27   run 'npm audit fix' to fix them, or 'npm audit' for details
28
29 > glee2@1.0.0 build /home/circleci/project/backend
30 > tsc
31
32 src/main.ts:31:21 - error TS1005: ',' expected.
33
34   .addBearerAuth()x // here is an intentional compile error. Remove the "x" and the backend should compile.
35   ~
36
37 src/main.ts:32:5 - error TS1128: Declaration or statement expected.
38
39   .build();
40   ~
41
42 Found 2 errors.
43
44 npm ERR! code ELIFECYCLE
45 npm ERR! errno 2
46 npm ERR! glee2@1.0.0 build: `tsc`
47 npm ERR! Exit status 2
48 npm ERR!
49 npm ERR! Failed at the glee2@1.0.0 build script.
50 npm ERR! This is probably not a problem with npm. There is likely additional logging output above.
```

# Test

## Frontend

holmHin  
Holm

Dashboard

Projects

Insights

Organization Settings

Plan

STEPS

TESTS

ARTIFACTS

1 / 1 parallel run

Spin up environment

3s

Preparing environment variables

0s

Checkout code

0s

Restoring cache

0s

Front-end test

1m 36s

```
43 > jest
44
45 • Deprecation Warning:
46   Option "setupTestFrameworkScriptFile" was replaced by configuration "setupFilesAfterEnv", which supports multiple paths.
47   Please update your configuration.
48   Configuration Documentation:
49   https://jestjs.io/docs/configuration.html
50
51 PASS src/app/components/Empty/Empty.spec.tsx (22.124s)
52
53 FAIL src/app/components/LoadingMessage/LoadingMessage.spec.tsx (22.527s)
54   ● <LoadingMessage> > Props > message > Should render the props message
55     expect(received).toBeTruthy()
56
57     Received: false
58
59     9 |         const message = 'Hello!';
60     10 |         const wrapper = shallow(<LoadingMessage message={message} />);
61     11 |         expect(wrapper.contains(<span>{message}</span>)).toBeTruthy(); //remove the question mark to make the test pass
62     12 |       });
63     13 |     });
64     14 |   });
65
66 at Object.<anonymous> (app/components/LoadingMessage/LoadingMessage.spec.tsx:11:59)
67
68 PASS src/app/components/OrdersTable/NoFilteredOrders/NoFilteredOrders.spec.tsx (22.883s)
69
70 PASS src/app/components/Pagination/Pagination.spec.tsx (23.853s)
71
72 PASS src/app/components/Employee/reducer/employees.spec.ts (24.836s)
73
74
75
```

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ARTIFACTS

Spin up environment

Preparing environment variables

Checkout code

Restoring cache

Front-end test

containers/Employee/components/Employees	0	0	0	0	...	44,247,257,262
index.tsx	0	0	0	0	...	95,498,588,513
containers/Employee/components/ViewEmployee	0	0	0	0	...	1,2,3,6,7,8,66,67
index.tsx	0	0	0	0	...	1
containers/Employee/models	0	0	0	0	...	1
EmployeeModel.ts	0	0	0	0	...	1
index.ts	0	100	100	0	...	1
containers/Employee/reducer	38.89	33.33	37.5	38.89	...	1
employees.ts	50	33.33	42.86	50	...	1
sampleData.ts	0	100	0	0	...	1
containers/Employee/services	30	0	10	30.77	...	1
employees.ts	30	0	10	30.77	...	1

```
128 -----
129
130 Test Suites: 1 failed, 4 passed, 5 total
131 Tests:      1 failed, 11 passed, 12 total
132 Snapshots: 0 total
133 Time:       138.939s
134 Ran all test suites.
135 npm ERR! code ELIFECYCLE
136 npm ERR! errno 1
137 npm ERR! typescript-react-redux-boilerplate@1.0.0 test: `jest`
138 npm ERR! Exit status 1
139 npm ERR!
140 npm ERR! Failed at the typescript-react-redux-boilerplate@1.0.0 test script.
141 npm ERR! This is probably not a problem with npm. There is likely additional logging output above.
142
143 npm ERR! A complete log of this run can be found in:
144 npm ERR! /home/circleci/.npm/_logs/2021-06-21T22_02_35_212Z-debug.log
145
```

## Backend

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Holm

Dashboard

Projects

Insights

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Plan

Status OPERATIONAL

Help

STEPS TESTS ARTIFACTS

1 / 1 parallel run

Spin up environment3s

Preparing environment variables0s

Checkout code0s

Restoring cache0s

Back-end test1m 15s

```
264 | orderRepository.ts | 50 | 100 | 0 | 87.5 | 15 |
265 | productRepository.ts | 90 | 100 | 0 | 87.5 | 16 |
266 | errors | 0 | 0 | 0 | 0 |
267 | error.filter.ts | 0 | 0 | 0 | 0 | 1,10,12,14,18 |
268 | status | 71.43 | 100 | 100 | 80 |
269 | status.controller.ts | 100 | 100 | 100 | 100 |
270 | status.module.ts | 0 | 100 | 100 | 0 | 1,4 |
271 | ----- |
272 |
273 | Summary of all failing tests
274 | FAIL src/modules/domain/employees/commands/handlers/employee-activator.handler.spec.ts
275 |   • Employee Remover › when a user activates an employee › should activate the employee from the repository
276 |     expect(jest.fn()).toBeCalledWith(...expected)
277 |
278 |     Expected: 100
279 |     Received: 101
280 |
281 |     Number of calls: 1
282 |
283 |     33 |
284 |     34 | // Assert
285 |     > 35 | expect(employeeRepository.findById).toBeCalledWith(100);
286 |         |                                     ^
287 |     36 | expect(employeeRepository.save).toBeCalled();
288 |     37 | });
289 |     38 | });
290 |
291 |
292 | at src/modules/domain/employees/commands/handlers/employee-activator.handler.spec.ts:35:43
293 | at fulfilled (src/modules/domain/employees/commands/handlers/employee-activator.handler.spec.ts:5:58)
294 |
295 |
296 | Test Suites: 1 failed, 50 passed, 51 total
297 | Tests: 1 failed, 26 passed, 27 total
```

Reconnected to Internet. Please refresh for updates.

udacityTest3	15	Success	default	main 64d7918 fix back-end tes	12m ago	5m 57s				
Jobs										
		build-frontend	29			49s				
		test-frontend	31			2m 44s				
		build-backend	28			29s				
		test-backend	30			1m 29s				
udacityTest3	14	Failed	default	main 5dba55e fix front-end test	21h ago	6m 14s				
Jobs										
		build-frontend	25			46s				
		test-frontend	27			3m 4s				
		build-backend	24			40s				
		test-backend	26			1m 20s				
udacityTest3	13	Failed	default	main c05603c activate unit tests	21h ago	5m 55s				
Jobs										
		build-frontend	20			42s				
		test-frontend	22			2m 56s				
		build-backend	21			41s				
		test-backend	23			1m 0s				

# 3 Analyze

## Frontend

holmHin

Holm

Dashboard

Projects

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Organization Settings

Plan

Status

OPERATIONAL

Help

Preparing environment variables

0s

Checkout code

0s

Restoring cache

0s

Frontend scan

2m 31s

Your output is too large to display in the browser.

Only the last 400000 characters are displayed.

Download the full output as a file

5502

define-property > is-descriptor > is-data-descriptor >

kind-of

5503

5504

5505

More info

https://npmjs.com/advisories/1490

5506

5507

5508

5509

5510

Low

Validation Bypass

5511

5512

Package

kind-of

5513

5514

Dependency of

jest

5515

5516

Path

jest > jest-cli > @jest/core > jest-config >

5517

@jest/test-sequencer > jest-runtime > jest-haste-map > sane

5518

> anymatch > micromatch > braces > snapdragon-node >

5519

define-property > is-descriptor > is-data-descriptor >

5520

kind-of

5521

5522

More info

https://npmjs.com/advisories/1490

5523

5524

5525

5526

5527

5528

5529

\*\*\*\*\*

This step produced more than the 100 MB limit of output, additional output will not be recorded.

5530

If you need this amount of output, we suggest writing it to a file and using store.artifacts to save it.

5531

\*\*\*\*\*

5532

5533

Exited with code exit status 1

5534

CircleCI received exit code 1

holmHin

Holm

Dashboard

Projects

Insights

Organization Settings

Plan

Status

OPERATIONAL

Help

Preparing environment variables

0s

Checkout code

0s

Restoring cache

0s

Backend scan

2m 27s

Your output is too large to display in the browser.

Only the last 400000 characters are displayed.

Download the full output as a file

5529

Package

kind-of

5530

5531

Dependency of

jest [dev]

5532

5533

5534

Path

jest > jest-cli > @jest/core > @jest/reporters >

5535

jest-runtime > jest-config > jest-jasmine2 >

5536

@jest/environment > @jest/transform > jest-haste-map > sane

5537

> anymatch > micromatch > braces > snapdragon-node >

5538

define-property > is-descriptor > kind-of

5539

5540

More info

https://npmjs.com/advisories/1490

5541

5542

5543

5544

5545

5546

5547

\*\*\*\*\*

This step produced more than the 100 MB limit of output, additional output will not be recorded.

5548

If you need this amount of output, we suggest writing it to a file and using store.artifacts to save it.

5549

\*\*\*\*\*

5550

5551

Exited with code exit status 1

5552

CircleCI received exit code 1

# 4 Alerts

Get Messages

Write

Chat

Address Book

Tag

Quick Filter

Search <Ctrl+K>

From CircleCI Builds <builds@circleci.com>

Reply

Forward

Archive

Junk

Delete

More

Subject [Workflow] Failed: holmHin/udacityTest3 on main / default (998dff0) 21:21

Uh-oh, this workflow did not succeed.

Author

Project

Workflow

Branch

Commit

Holm

holmHin/udacityTest3

default

main

Updated config.yml 998dff0

Jobs

build-frontend

scan-frontend

test-frontend

build-backend

test-backend

scan-backend

Success

Failed

Success

Success

Success

Failed

You're receiving this email because you follow holmHin/udacityTest3 on CircleCI.

Unsubscribe by [unfollowing holmHin/udacityTest3](#) or [changing your email notification settings](#).

Today

Pane

# Section 3

## Infrastructure Phase:

Dashboard

Project

Branch

Workflow

Job

All Pipelines > udacityTest3 > main > default > deploy-infrastructure (108)

🔄 deploy-infrastructure

Failed

Rerun

⋮

Duration / Finished

2m 26s / 4s ago

Queued

0s

Executor

Docker Medium

Branch

main

Commit

1c486ff

Author & Message

share backendIP

STEPS

TESTS

ARTIFACTS

1 / 1 parallel run

Spin up environment

7s

📄

⬇

Preparing environment variables

0s

📄

⬇

Checkout code

0s

📄

⬇

Ensure back-end infrastructure exists

1m 8s

📄

⬇

get backend public-ip

1s

📄

⬇

Ensure front-end infrastructure exist

1m 8s

📄

⬇

Add back-end ip to ansible inventory

0s

📄

⬇

❗ Persisting to workspace

0s

📄

⬇

1

2

tar utility is not present in this image but it is required. Please install it to have workflow workspace capability.

## Smoke Test

Dashboard

Project

Branch

Workflow

Job

All Pipelines > udacityTest3 > main > default > smoke-test (273)

🔄 smoke-test

Failed

Rerun

⋮

Duration / Finished

14s / 0s ago

Queued

0s

Executor

Docker Medium

Branch

main

Commit

dcb350e

Author & Message

Role Back

STEPS

TESTS

ARTIFACTS

1 / 1 parallel run

Spin up environment

2s

📄

⬇

Preparing environment variables

0s

📄

⬇

Checkout code

0s

📄

⬇

Install dependencies

10s

📄

⬇

Get backend url

0s

📄

⬇

❗ Backend smoke test.

0s

📄

⬇

1

2

3

#!/bin/sh -eo pipefail

4

5

6

7

curl https://{BACKEND\_IP}:3000/api/status

curl: (3) URL using bad/illegal format or missing URL

Exited with code exit status 3

CircleCI received exit code 3

Revert migrations

0s

📄

⬇

# Roleback

Dashboard

Project

Branch

Workflow

Job

All Pipelines > udacityTest3 > main > default > smoke-test (525)

smoke-test

Failed

Rerun

Duration / Finished

Queued / Preparing

Executor

Branch

Commit

Author & Message

31s / 2h ago

0s / 37s

Docker Medium

main

7e55a23

finalize

STEPS

TESTS

ARTIFACTS

1 / 80 parallel runs

Spin up environment

14s

Preparing environment variables

0s

Checkout code

0s

Install dependencies

12s

Get backend url

0s

Backend smoke test.

0s

```
1 #!/bin/sh -eo pipefail
2 BACKEND_IP=$(curl -H "token: e14ce597-0428-4f67-acb8-27c8e10191ca" --request GET https://api.menstash.io/values/url)
3 echo $BACKEND_IP
4 curl https://$BACKEND_IP:3030/api/status
5
6   % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
7   Dload  Upload   Total     Spent    Left      Speed
8 100    14    100    14     0     875      0 --:--:-- --:--:-- --:--:--   875
9 18.196.236.117
10 curl: (7) Failed to connect to 18.196.236.117 port 3030: Connection refused
11
12 Exited with code exit status 7
13 CircleCI received exit code 7
```

Revert migrations

0s

```
1 #!/bin/sh -eo pipefail
2 SUCCESS=$(curl -H "token: b994e046-2a53-4a93-80cf-feb669a7ec9b" --request GET https://api.menstash.io/values/success)
3 if(( $SUCCESS==1 ));
4 then
5     cd root/project/backend
6     npm i
7     npm run migrations:revert
8 fi
9
10   % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
11   Dload  Upload   Total     Spent    Left      Speed
12 100     1    100     1     0     50      0 --:--:-- --:--:-- --:--:--    50
13 /bin/sh: 0=: not found
14 CircleCI received exit code 0
```

Destroy backend

1s

```
1 #!/bin/sh -eo pipefail
2 aws cloudformation delete-stack --stack-name udaPeople-Backend-$CIRCLE_WORKFLOW_ID
3
4 CircleCI received exit code 0
```

Destroy frontend

2s

```
1 #!/bin/sh -eo pipefail
2 aws s3 rm s3://udapeople-$CIRCLE_WORKFLOW_ID --recursive
3 aws cloudformation delete-stack --stack-name udaPeople-Frontend-$CIRCLE_WORKFLOW_ID
4 curl --request POST --url https://circleci.com/api/v2/workflow/$CIRCLE_WORKFLOW_ID/cancel --header "Circle-Token: ${CIRCLE_TOKEN}"
5
6 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/1ceff9123b66b50a7d3cb5b221160855.eot
7 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/2fa692cd55bfc03c228c0ab271e4388c.woff
8 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/7d234c755f55c47d2c5a.js
9 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/images/6ab15f4239b7d187935cf6f4ec3313bf-kiwi.svg
10 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/bundle.js
11 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/224b6d9d16679dab02826a2a7ea705eb.ttf
12 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/index.html
13 delete: s3://udapeople-Saebf008-2142-41c3-bc1d-lebe86a89735/f350895f981598d7fc5c.js
14 {
15   "message" : "Project not found"
16 }
17 CircleCI received exit code 0
```

holmHin

Holm

Dashboard

Projects

Insights

Organization Settings

Plan

Notifications

Status

Help

Promotion

holmHim  
Holm

Dashboard

Projects

Insights

Organization Settings

Plan

Notifications

Status DEGRADED

Help

Dashboard

Project

Branch

Workflow

Job

All Pipelines

udacityTest3

main

default

cloudfront-update (558)

cloudfront-update

Success

Rerun

Duration / Finished

Queued

Executor

Branch

Commit

Author & Message

10s / 8m ago

0s

Docker Medium

main

22c9863

finalize

STEPS

TESTS

ARTIFACTS

1 / 80 parallel runs

Spin up environment

7s

Preparing environment variables

0s

Checkout code

0s

Install dependencies

0s

Update cloudfront distribution

1s

```
1 #!/bin/bash -eo pipefail
2 aws cloudformation update-stack --stack-name udaPeople \
3 --template-body file:///circleci/files/cloudfront.yml \
4 --parameters ParameterKey=WorkflowID,ParameterValue=$CIRCLE_WORKFLOW_ID
5
6 WARNING: terminal is not fully functional
7 - (press RETURN){
8   "StackID": "arn:aws:cloudformation:*****:18879486952:stack/udaPeople
9   /c22ef800-d390-11eb-ac02-06214f92ecaz"
10 }
11 CircleCI received exit code 0
```

CleanUp

holmHim  
Holm

Dashboard

Projects

Insights

Organization Settings

Plan

Notifications

Status DEGRADED

Help

Dashboard

Project

Branch

Workflow

Job

All Pipelines

udacityTest3

main

default

cleanup (559)

cleanup

Success

Rerun

Duration / Finished

Queued

Executor

Branch

Commit

Author & Message

11s / 9m ago

0s

Docker Medium

main

22c9863

finalize

STEPS

TESTS

ARTIFACTS

1 / 80 parallel runs

Spin up environment

4s

Preparing environment variables

0s

Checkout code

0s

Find and delete old stacks

6s

```
1 #!/bin/bash -eo pipefail
2
3 export OldWorkflowID=$(aws cloudformation \
4 list-exports --query "Exports[?Name==\ WorkflowID\ ].Value" \
5 --no-paginate --output text)
6 export STACKS=$(aws cloudformation list-stacks --query "StackSummaries[?StackName==\
7 --stack-status-filter CREATE_COMPLETE --no-paginate --output text])
8 echo $OldWorkflowID
9 echo $STACKS
10 if [[ "${STACKS[@]}" =~ "${OldWorkflowID}" ]]
11 then
12   echo Removing old stack ${OldWorkflowID}
13   aws cloudformation delete-stack --stack-name udaPeople-Frontend-${OldWorkflowID}
14   aws s3 rm s3://udapeople-${OldWorkflowID} --recursive
15   aws cloudformation delete-stack --stack-name udaPeople-Backend-${OldWorkflowID}
16 fi
17
18 ff622ba6-9154-46ff-95f1-069cc7de0ae8
19 udaPeople-Frontend-4722ed25-8cd7-406a-a5fb-1abbe785b4c1
20 Removing old stack ff622ba6-9154-46ff-95f1-069cc7de0ae8
21 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/1ceff9123b6db50a7d3cbsb221160855.png
22 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/224b6d9d16679dab02826a2a7aa709eb.ttf
23 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/images/6ab15f4239b7d187935cf6f4ec3313bf-kiwi.svg
24 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/7d234c755f55c47d2c5a.js
25 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/f350895f981598d7fc5c.js
26 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/bundle.js
27 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/index.html
28 delete: s3://udapeople-ff622ba6-9154-46ff-95f1-069cc7de0ae8/2fa892cd93bfc83c228c0ab271e4388c.woff
29 CircleCI received exit code 0
```



## Commit on other then main

The screenshot displays a CI/CD pipeline interface for a project named 'holmHin'. The pipeline is titled 'default' and has a 'Success' status. The interface shows the following details:

- Dashboard:** holmHin
- Project:** udacityTest3
- Branch:** test
- Workflow:** default
- Duration / Finished:** 2m 29s / 0s ago
- Branch:** test
- Commit:** b05cb42
- Author & Message:** finalize

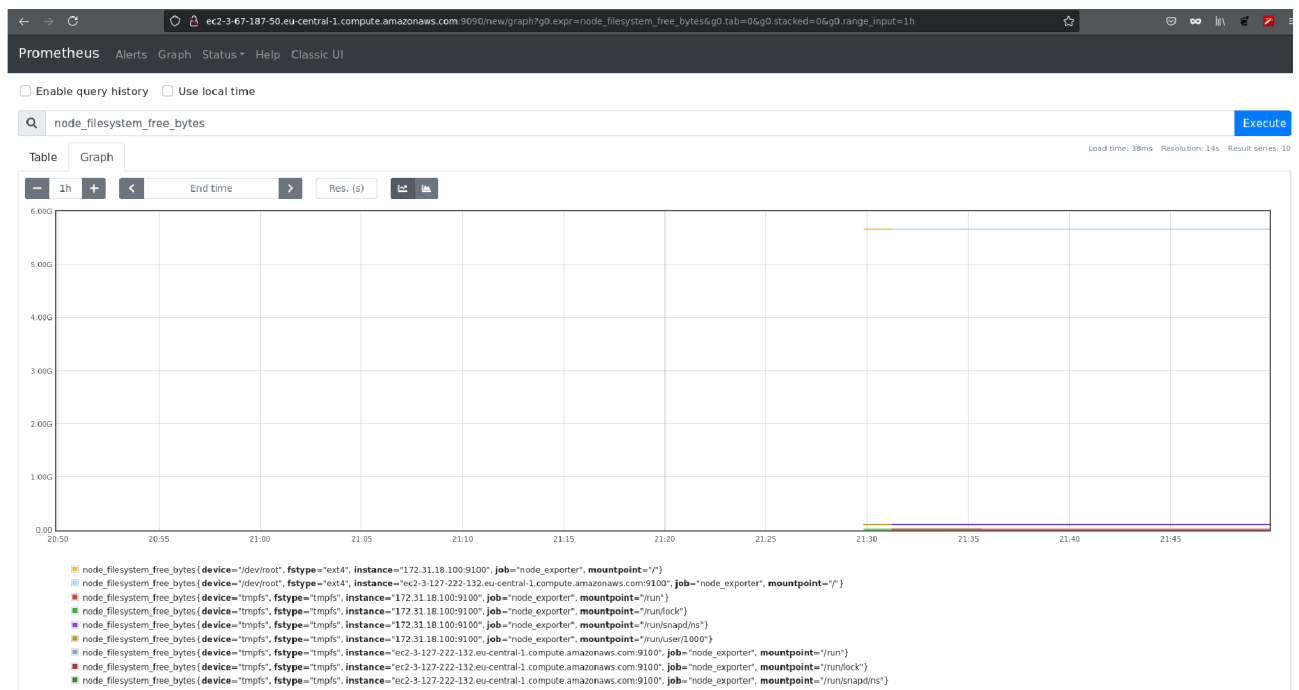
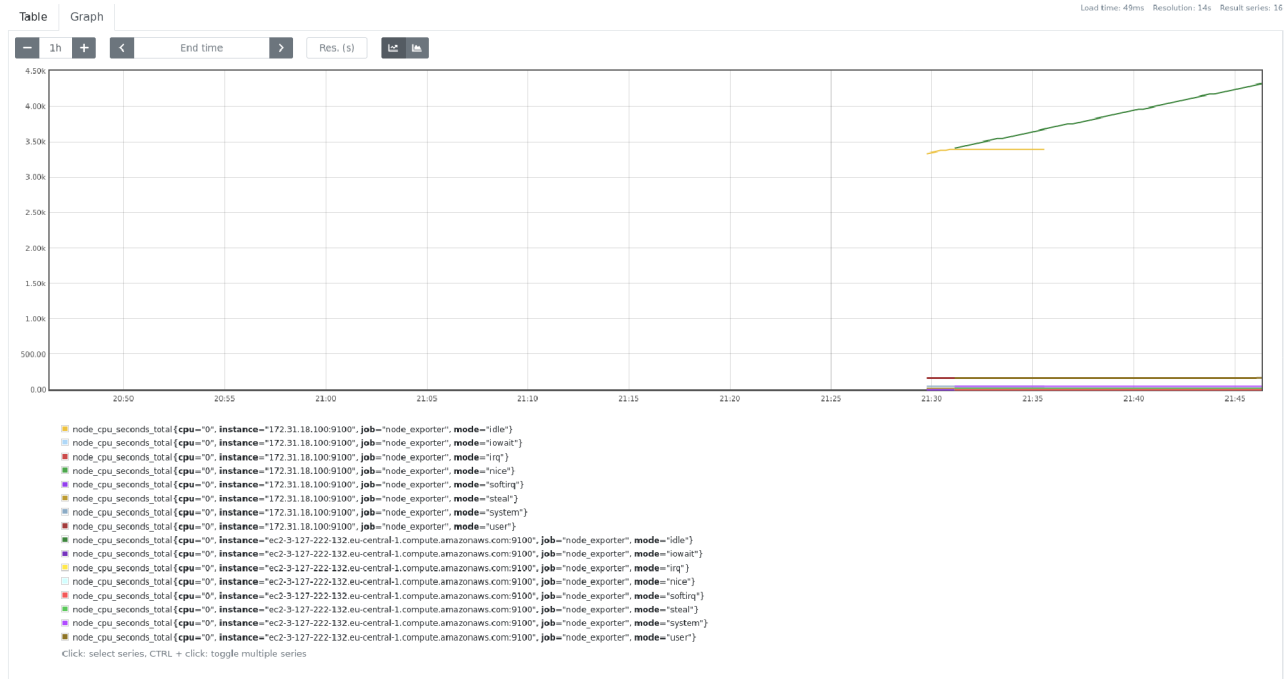
The pipeline consists of the following steps:

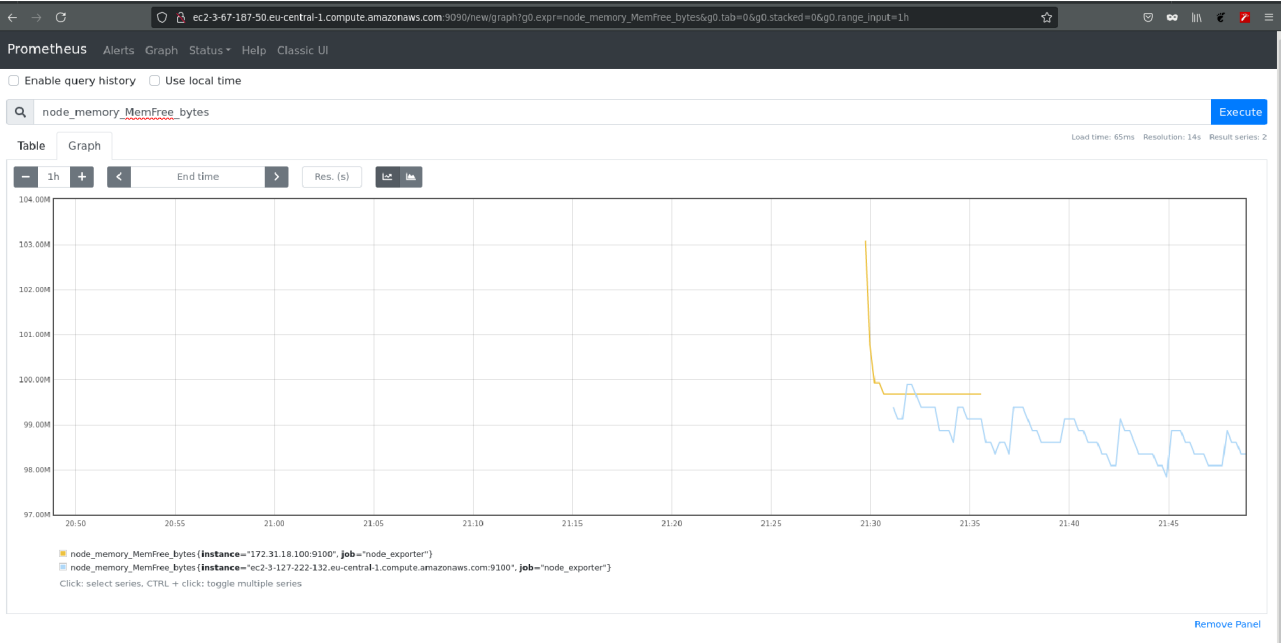
- build-frontend:** 52s (Success)
- scan-frontend:** 1m 30s (Success)
- test-frontend:** 56s (Success)
- build-backend:** 54s (Success)
- scan-backend:** 1m 28s (Success)
- test-backend:** 1m 18s (Success)

The interface also includes a sidebar with navigation options: Dashboard, Projects, Insights, Organization Settings, and Plan. At the top right, there are buttons for 'Insights' and 'Rerun'.

# Section 4

## Monitoring





# Alerts

[←](#) [→](#) [↻](#)

ec2-3-120-231-245.eu-central-1.compute.amazonaws.com:9090/alerts

Prometheus Alerts Graph Status ▾ Help

## Alerts

Inactive (0) Pending (0) Firing (1)

☐ Show annotations

/etc/prometheus/rules.yml > Memory

**Moinsen** (1 active)

From: alert@partyschwerpunkt.de ☆

Subject: [FIRING:1] (Moinsen ec2-3-127-222-132.eu-central-1.compute.amazonaws.com:9100 node\_exporter prometheus critical)

To: Me <holm.hinrichs@t-online.de> ★

1 alert for

[View In AlertManager](#)

**[1] Firing**  
**Labels**  
alertname = Moinsen  
instance = ec2-3-127-222-132.eu-central-1.compute.amazonaws.com:9100  
job = node\_exporter  
monitor = prometheus  
severity = critical  
**Annotations**  
description = Instance is down, service is not available!  
summary = Instance is down for > 1 minut  
[Source](#)

Sent by AlertManager