

- Eine Node.JS-Anwendung wurde mit Express erstellt.
- Diese wird nach jedem gepushten Commit über eine Azure DevOps-Pipeline in einer Azure Web App bereitgestellt.
- Die Node.JS-Anwendung wurde auch mit Testfällen ausgestattet.
- Des Weiteren wurde eine Release-Pipeline erstellt, die automatisch die Übernahme eines Releases in die Produktion sicherstellt, dieses wurde mit einer manuellen Prüfung versehen, damit es nicht nach jedem Build veröffentlicht wird.
- Schließlich wurde auch Azure Application Insights integriert.

# Links

## Development

- <https://dominikwukovatznodeappryksmby4kranq.azurewebsites.net>

## Production

- <https://lab2dominikwukovatznodeapp.azurewebsites.net/>

# Screenshot Azure DevOps

- Summary Pipeline

The screenshot displays the Azure DevOps pipeline interface. On the left, a sidebar shows the 'Jobs in run #20211024.16' for the 'WukovatzD-SoftwareDeployment\_Wukovatz' pipeline. The jobs listed are: Initialize job (3m 41s), Checkout WukovatzD/SoftwareDe... (2s), Install Node.js (<1s), **npm install and build** (13s), AzureWebApp (1m 33s), PublishTestResults (6s), PublishBuildArtifacts (1m 40s), Post-job: Checkout WukovatzD/..., and Finalize Job (<1s). The 'npm install and build' job is selected, and its details are shown on the right.

The details of the 'npm install and build' task are as follows:

```

1 Starting: npm install and build
2 =====
3 Task : Command line
4 Description : Run a command line script using bash on Linux and macOS and cmd.exe on Windows
5 Version : 2.182.0
6 Author : Microsoft Corporation
7 Help : https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/command-line
8 =====
9 Generating script.
10 =====
11 /usr/bin/bash --noprofile --norc /home/vsts/work/_temp/951a527a-289c-417a-bbad-3bdaab4a69.sh
12 npm WARN webapp@1.0.0 No description
13 npm WARN webapp@1.0.0 No repository field.
14 npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules/mocha/node_modules/fsevents):
15 npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})
16
17 added 157 packages from 97 contributors and audited 158 packages in 3.915s
18
19 15 packages are looking for funding
20   run npm fund for details
21
22 found 2 vulnerabilities (1 moderate, 1 high)
23   run npm audit fix to fix them, or npm audit for details
24
25 > webapp@1.0.0 test /home/vsts/work/1/s/webapp
26 > mocha test --reporter mocha-junit-reporter
27
28 Finishing: npm install and build
  
```

← Jobs in run #20211024.16

WukovatzD.SoftwareDeployment\_Wukovatz

obs

✓ Job3m 41s

✓ Initialize job3s

✓ Checkout WukovatzD/SoftwareDe...2s

✓ Install Nodejs<1s

✓ npm install and build13s

✓ AzureWebApp1m 33s

✓ PublishTestResults6s

✓ PublishBuildArtifacts1m 40s

✓ Post-job: Checkout WukovatzD/<1s

✓ Finalize Job<1s

✓ PublishBuildArtifacts

1 Starting: PublishBuildArtifacts

2 =====

3 Task : Publish build artifacts

4 Description : Publish build artifacts to Azure Pipelines or a Windows file share

5 Version : 1.192.0

6 Author : Microsoft Corporation

7 Help : <https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/publish-bu>

8 =====

9 Async Command Start: Upload Artifact

10 Uploading 1631 files

11 Total file: 1631 ---- Processed file: 77 (4%)

12 Total file: 1631 ---- Processed file: 240 (14%)

13 Total file: 1631 ---- Processed file: 384 (23%)

14 Total file: 1631 ---- Processed file: 544 (33%)

15 Total file: 1631 ---- Processed file: 707 (43%)

16 Total file: 1631 ---- Processed file: 872 (53%)

17 Total file: 1631 ---- Processed file: 1045 (64%)

18 Total file: 1631 ---- Processed file: 1211 (74%)

19 Total file: 1631 ---- Processed file: 1384 (84%)

20 Total file: 1631 ---- Processed file: 1546 (94%)

21 File upload succeed.

22 Upload '/home/vsts/work/1/s/WebApp' to file container: '#/1611248/drop'

23 Associated artifact 3 with build 46

24 Async Command End: Upload Artifact

25 Finishing: PublishBuildArtifacts

- Succeeded

✓ #20211024.30 Update azure-pipelines.yml for Azure Pipelines

on WukovatzD.SoftwareDeployment\_Wukovatz

Run new

This run has been retained forever by 3 (Pipeline).

View retention leases

Summary Tests Releases

Summary

1 Run(s) Completed ( 1 Passed, 0 Failed )

1 Total tests

1 Passed

0 Failed

0 Others

100% Pass percentage

3ms Run duration

0 Tests not reported

Filter by test or run name

Tags Test file Owner Aborted (+1)

Azure DevOps

111875 / LabTwo / Pipelines / WukovatzD.SoftwareDeploy... / 20211024.16

Jobs

✓ Job3m 41s

✓ Initialize job3s

✓ Checkout WukovatzD/SoftwareDe...2s

✓ Install Nodejs<1s

✓ npm install and build13s

✓ AzureWebApp1m 33s

✓ PublishTestResults6s

✓ PublishBuildArtifacts1m 40s

✓ Post-job: Checkout WukovatzD/<1s

✓ Finalize Job<1s

Job

1 echo: start: PublishBuildArtifacts

2 echo: start: PublishBuildArtifacts

3 echo: start: PublishBuildArtifacts

4 echo: start: PublishBuildArtifacts

5 echo: start: PublishBuildArtifacts

6 echo: start: PublishBuildArtifacts

7 echo: start: PublishBuildArtifacts

8 echo: start: PublishBuildArtifacts

9 echo: start: PublishBuildArtifacts

10 echo: start: PublishBuildArtifacts

11 echo: start: PublishBuildArtifacts

12 echo: start: PublishBuildArtifacts

13 echo: start: PublishBuildArtifacts

14 echo: start: PublishBuildArtifacts

15 echo: start: PublishBuildArtifacts

16 echo: start: PublishBuildArtifacts

17 echo: start: PublishBuildArtifacts

18 echo: start: PublishBuildArtifacts

19 echo: start: PublishBuildArtifacts

20 echo: start: PublishBuildArtifacts

21 echo: start: PublishBuildArtifacts

22 echo: start: PublishBuildArtifacts

23 echo: start: PublishBuildArtifacts

24 echo: start: PublishBuildArtifacts

25 echo: start: PublishBuildArtifacts

- Failed

✗ #20211101.1 Changed test to non working

on WukovatzD.SoftwareDeployment\_Wukovatz

Run new

This run will be cleaned up after 1 month based on your project settings.

Summary Tests Releases

Summary

1 Run(s) Completed ( 0 Passed, 1 Failed ) 1 unique failing test in the last 14 days

1 Total tests

0 Passed

1 Failed

0 Others

0% Pass percentage

3ms Run duration

0 Tests not reported

Filter by test or run name

Tags Test file Owner Aborted (+1)

Test

Duration

Failing since

Failing build

Tags

✗ JUnit-test-results.xml (1/1)

0:00:00.003

Just now

Current build

✗ Array.indexOf() should return -1 when the value is not present

← Jobs in run #20211101.1

WukovatzD.SoftwareDeployment\_Wukovatz

Jobs

Job

13s

Initialize job

3s

Checkout WukovatzD/SoftwareDe...

2s

Install Node.js

<1s

npm install and build

3s

PublishTestResults

3s

ArchiveFiles

<1s

AzureWebApp

<1s

PublishBuildArtifacts

<1s

Post-job: Checkout WukovatzD/...

<1s

Finalize Job

<1s

Job

1 Pool: Azure Pipelines

2 Image: ubuntu-latest

3 Agent: Hosted Agent

4 Started: Just now

5 Duration: 13s

6

7 Job preparation parameters

8 All tests passed

# Screenshot Release Pipeline

- Release Pipeline

111875 / LabTwo / Pipelines / Releases / New release pipeline / Release-1

New release pipeline > Release-1

Pipeline Variables History + Deploy Cancel Refresh Edit ...

Release

Manually triggered

by Dominik Wukovatz

24.10.2021, 19:20

Artifacts

WukovatzD.Software...

0804f0cad

main

Stages

Stage 1

Not deployed

Stage 2

Not deployed

New release pipeline > Release-1

Pipeline Variables History + Deploy Cancel Approve multiple Refresh Edit ...

Release

Manually triggered

by Dominik Wukovatz

24.10.2021, 19:20

Artifacts

WukovatzD.Software...

0804f0cad

main

Stages

Stage 1

Pending approval

On Dominik Wukovatz

Approve

Stage 2

Not deployed

## Release

### Manually triggered

by Dominik Wukovatz  
24.10.2021, 19:20

#### Artifacts



\_WukovatzD\_Software...  
0804f0cad  
main

## Stages



### Stage 1

In progress

2/3  
tasks

Download  
Artifacts  
00:00

### Stage 2

Not deployed

111875 / LabTwo / Pipelines / Releases / Release pipeline / Release-7

Release pipeline > Release-7

## Release

### Manually triggered

by Dominik Wukovatz  
1.11.2021, 11:15

#### Artifacts



drop  
20211101.3  
main

## Stages

### Stage 1

Succeeded

on 1.11.2021, 11:16

### Stage 2

Succeeded

on 1.11.2021, 11:19