

Lab2:

Azure DevOps build/Test/Deploy Pipeline erfolgreich:

Nach dem Push auf das GitHub Repo, startet die Pipeline automatisch aufgrund des eingestellten triggers im .yaml file.

Hierbei wird nach den erfolgreichen Tests, die applikation automatisch auf eine Azure Web App deployed.

trigger:
- main

The screenshot shows the Azure DevOps interface for a pipeline named 'Jobs in run #20201110.45'. The pipeline is successful, with all jobs marked with green checkmarks. The 'npm install and test' job is highlighted, showing its details and a log snippet. The log snippet shows a successful test run with the following output:

```
3 Task : Command line
4 Description : Run a command line script using Bash on Linux and macOS and cmd.exe on Windows
5 Version : 2.177.3
6 Author : Microsoft Corporation
7 Help : https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/command-line
8
9 Generating script.
10 ===== Starting Command Output =====
11 /bin/bash --noprofile --norc /home/vsts/work/_temp/4527ae16-4ee6-4ad3-9a14-e1282a704be2.sh
12 npm WARN hmg@1.0.0 No description
13 npm WARN hmg@1.0.0 No repository field.
14 npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.3 (node_modules/fsevents):
15 npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.3: wanted {"os":"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})
16
17 added 8 packages from 13 contributors and audited 199 packages in 1.535s
18
19 15 packages are looking for funding
20 run 'npm fund' for details
21
22 found 0 vulnerabilities
23
24
25 > hmg@1.0.0 test /home/vsts/work/1/s/HelloExpress
26 > mocha test
27
28 Example app listening at http://localhost:3000
29
30
31 /GET
32   ✓ it should status 200 and return hello world (57ms)
33
34 Array
35   #indexOf()
36     ✓ should return -1 when the value is not present
37
38 2 passing (64ms)
39
40 Finishing: npm install and test
```

Azure DevOps build/Test/Deploy Pipeline fehlgeschlagen:

Nun wurde der Rückgabe-Wert "Hello World!" zu "Hello Worlddd!" geändert und erneut committed+gepushed.

Die Pipeline startet wieder automatisch, schlägt diesmal jedoch fehl, da ein test fehlschlägt. Dadurch wird NICHT deployed.

The screenshot shows the Azure DevOps interface for a pipeline named 'Jobs in run #20201110.46'. The pipeline is failed, with the 'npm install and test' job marked with a red X. The log snippet shows a failed test run with the following output:

```
25 > hmg@1.0.0 test /home/vsts/work/1/s/HelloExpress
26 > mocha test
27
28 Example app listening at http://localhost:3000
29
30
31 /GET
32   1) it should status 200 and return hello world
33
34 Array
35   #indexOf()
36     ✓ should return -1 when the value is not present
37
38 1 passing (74ms)
39 1 failing
40
41 1) /GET
42     it should status 200 and return hello world:
43
44     Uncaught AssertionError: expected 'Hello Worlddd!' to equal 'Hello World!'
45     + expected - actual
46
47     -Hello Worlddd!
48     +Hello World!
49
50 at chai.request.get.end (test/test.js:18:31)
51 at Test.Request.callback (node_modules/superagent/lib/node/index.js:716:12)
52 at parser (node_modules/superagent/lib/node/index.js:916:18)
53 at IncomingMessage.res.on (node_modules/superagent/lib/node/parsers/json.js:19:7)
54 at endReadableNT (_stream_readable.js:1145:12)
55 at process._tickCallback (internal/process/next_tick.js:61:19)
56
57
58 npm ERR! Test failed. See above for more details.
59
60 #error! Pipeline failed with code 1!
61
62 Finishing: npm install and test
```

Azure DevOps Release Pipeline:

Es wurde eine Release Pipeline erstellt die immer angetriggert wird, wenn die build/Test/Deploy Pipeline fertig ist.

Hierbei startet sie jedoch nicht direkt, sondern muss (wie eingestellt), vor dem Release noch von der/den eingestellten Person/en approved werden.

The screenshot shows the 'New release pipeline' configuration in Azure DevOps. The 'Pre-deployment conditions' panel is open, showing 'Pre-deployment approvals' enabled. The 'Approvers' list includes 'Matthias Mandl'. The 'Timeout' is set to 30 days. The 'Approval policies' section has three checkboxes: 'The user requesting a release or deployment should not approve it' (unchecked), 'Revalidate identity of approver before completing the approval' (unchecked), and 'Skip approval if the same approver approved the previous stage' (unchecked).

Die Releases und ausstehende Releases der Release Pipeline:

The screenshot shows the 'Releases' page in Azure DevOps. The 'New release pipeline' panel is open, showing 'Pending approval on Stage 1 stage.' The table lists releases from Release-13 to Release-18, with their creation times and stage status.

Releases	Created	Stages
Release-18 20201108.27 main	8.11.2020, 18:05:37	Stage 1
Release-17 20201108.25 main	8.11.2020, 17:53:32	Stage 1
Release-16 20201108.24 main	8.11.2020, 17:04:11	Stage 1
Release-15 20201108.23 main	8.11.2020, 16:51:15	Stage 1
Release-14 20201108.23 main	8.11.2020, 16:44:13	Stage 1
Release-13 20201108.23 main	8.11.2020, 16:38:48	Stage 1

Bestätigen des Releases:

Azure DevOps interface showing the 'New release' dialog for Release-18. The 'Pre-deployment approval pending' section is highlighted, showing a pending approval from Matthias Mandl. The 'Approve' button is highlighted with a red box.

Erfolgreicher Release:

Azure DevOps interface showing the 'Release-18' pipeline. The 'Stage 1' section is highlighted, showing a successful deployment. The 'Deployment succeeded' message is visible.

Erfolgreicher Release inklusive eingebundenem Applikation Azure Application Insights:

Azure DevOps interface showing the 'Agent job' details for Release-18. The 'Agent job' section is highlighted, showing a successful deployment. The 'Agent job' details are visible.

Einbindung von Application Insights:

Microsoft Azure portal showing the 'MyMMWebApp' application. The 'Anwendungsübersicht' (Application Overview) section is highlighted, showing the application's status and metrics. The 'Web' component is highlighted, showing a successful deployment.