

AWS CodeBuild | AWS ECR | AWS CodeBuild Push Docker Image to ECR | AWS CodeBuild Example

AWS CodeBuild is a fully managed continuous integration service that compiles source code, runs tests, and produces software packages that are ready to deploy. With CodeBuild, you don't need to provision, manage, and scale your own build servers.

Repository to Clone

<https://github.com/joshking1/node-app.git>

- Create an Elastic Container Registry on AWS
- Allow the code build to automatically assign name of the IAM role
- Go to the IAM, select ROLE and assign the created IAM role by code build, full access to the amazonecrfullaccess
- Create Personal Access Token (PAT) in the github and assign it to the codebuild
- Select the operating system where the docker is installed
- Enable this flag if you want to build Docker images or want your builds to get elevated privileges
- Add the details for logs
- Start the build
- Images from my build

Showing the last 231 lines of the build log. [View entire log](#)

[Tail logs](#)

^ Show previous logs

```
1 [Container] 2022/01/04 11:17:08 Waiting for agent ping
2 [Container] 2022/01/04 11:17:09 Waiting for DOWNLOAD_SOURCE
3 [Container] 2022/01/04 11:17:10 Phase is DOWNLOAD_SOURCE
4 [Container] 2022/01/04 11:17:10 CODEBUILD_SRC_DIR=/codebuild/output/src707325735/src/github.com/joshking1/node-app
5 [Container] 2022/01/04 11:17:10 YAML location is /codebuild/output/src707325735/src/github.com/joshking1/node-app/buildspec.yml
6 [Container] 2022/01/04 11:17:10 Processing environment variables
7 [Container] 2022/01/04 11:17:10 No runtime version selected in buildspec.
8 [Container] 2022/01/04 11:17:13 Moving to directory /codebuild/output/src707325735/src/github.com/joshking1/node-app
9 [Container] 2022/01/04 11:17:13 Configuring ssm agent with target id: codebuild:2d9fddb0-bc34-4357-acee-b32fa4095473
10 [Container] 2022/01/04 11:17:13 Successfully updated ssm agent configuration
11 [Container] 2022/01/04 11:17:13 Registering with agent
12 [Container] 2022/01/04 11:17:13 Phases found in YAML: 3
13 [Container] 2022/01/04 11:17:13 PRE_BUILD: 6 commands
14 [Container] 2022/01/04 11:17:13 BUILD: 4 commands
15 [Container] 2022/01/04 11:17:13 POST_BUILD: 7 commands
16 [Container] 2022/01/04 11:17:13 Phase complete: DOWNLOAD_SOURCE State: SUCCEEDED
17 [Container] 2022/01/04 11:17:13 Phase context status code: Message:
18 [Container] 2022/01/04 11:17:13 Entering phase INSTALL
19 [Container] 2022/01/04 11:17:13 Phase complete: INSTALL State: SUCCEEDED
20 [Container] 2022/01/04 11:17:13 Phase context status code: Message:
21 [Container] 2022/01/04 11:17:13 Entering phase PRE_BUILD
22 [Container] 2022/01/04 11:17:13 Running command echo Logging in to Amazon ECR...
23 Logging in to Amazon ECR...
24
```

```
25 [Container] 2022/01/04 11:17:13 Running command aws --version
26 aws-cli/1.20.58 Python/3.8.0 Linux/4.14.248-189.473.amzn2.aarch64 exec-env/AWS_EC2 botocore/1.21.58
27
28 [Container] 2022/01/04 11:17:21 Running command $(aws ecr get-login --region $AWS_DEFAULT_REGION --no-include-email)
29 WARNING! Using --password via the CLI is insecure. Use --password-stdin.
30 WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
31 Configure a credential helper to remove this warning. See
32 https://docs.docker.com/engine/reference/commandline/login/#credentials-store
33
34 Login Succeeded
35
36 [Container] 2022/01/04 11:17:22 Running command REPOSITORY_URI=232110768834.dkr.ecr.us-east-2.amazonaws.com/mynodeapp
37
38 [Container] 2022/01/04 11:17:22 Running command COMMIT_HASH=$(echo $CODEBUILD_RESOLVED_SOURCE_VERSION | cut -c 1-7)
39
40 [Container] 2022/01/04 11:17:22 Running command IMAGE_TAG=build-$(echo $CODEBUILD_BUILD_ID | awk -F":" '{print $2}')
41
42 [Container] 2022/01/04 11:17:22 Phase complete: PRE_BUILD State: SUCCEEDED
43 [Container] 2022/01/04 11:17:22 Phase context status code: Message:
44 [Container] 2022/01/04 11:17:22 Entering phase BUILD
45 [Container] 2022/01/04 11:17:22 Running command echo Build started on `date`
46 Build started on Tue Jan 4 11:17:22 UTC 2022
47
48 [Container] 2022/01/04 11:17:22 Running command echo Building the Docker image...
49 Building the Docker image...
50
51 [Container] 2022/01/04 11:17:22 Running command docker build -t $REPOSITORY_URI:latest .
52 Sending build context to Docker daemon 72.19kB
53
54 Step 1/7 : FROM node:carbon
55 carbon: Pulling from library/node
56 d07bfc5901df: Pulling fs layer
57 b4f31062581d: Pulling fs layer
58 d62337a296a6: Pulling fs layer
59 403697a3e152: Pulling fs layer
60 0179cb8c1733: Pulling fs layer
61 6813afc532cf: Pulling fs layer
62 8935ceca1893: Pulling fs layer
```

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60 0179cb8c1733: Pulling fs layer
61 6813afc532cf: Pulling fs layer
62 8935ceca1893: Pulling fs layer
63 dfbca36bef87: Pulling fs layer
64 5195d0adf884: Pulling fs layer
65 403697a3e152: Waiting
66 0179cb8c1733: Waiting
67 6813afc532cf: Waiting
68 8935ceca1893: Waiting
69 dfbca36bef87: Waiting
70 5195d0adf884: Waiting
71 d62337a296a6: Verifying Checksum
72 d62337a296a6: Download complete
73 b4f31062581d: Verifying Checksum
74 b4f31062581d: Download complete
75 d07bcf5901df: Verifying Checksum
76 d07bcf5901df: Download complete
77 6813afc532cf: Verifying Checksum
78 6813afc532cf: Download complete
79 403697a3e152: Verifying Checksum
80 403697a3e152: Download complete
81 dfbca36bef87: Verifying Checksum
82 dfbca36bef87: Download complete
83 8935ceca1893: Verifying Checksum
84 8935ceca1893: Download complete
85 5195d0adf884: Verifying Checksum
86 5195d0adf884: Download complete
87 0179cb8c1733: Verifying Checksum
88 0179cb8c1733: Download complete
89 d07bcf5901df: Pull complete
90 b4f31062581d: Pull complete
91 d62337a296a6: Pull complete
92 403697a3e152: Pull complete
93 0179cb8c1733: Pull complete
94 6813afc532cf: Pull complete
95 8935ceca1893: Pull complete
96 dfbca36bef87: Pull complete
```

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98 Digest: sha256:a681bf74805b80d03eb21a6c0ef168a976108a287a74167ab593fc953aac34df
99 Status: Downloaded newer image for node:carbon
100 ---> 50c57a9369c7
101 Step 2/7 : WORKDIR /usr/src/app
102 ---> Running in 741e3fdbc8dd
103 Removing intermediate container 741e3fdbc8dd
104 ---> 6116c96971e0
105 Step 3/7 : COPY package*.json ./
106 ---> 8f8d6aa6e1c2
107 Step 4/7 : RUN npm install
108 ---> Running in dce6fa7bc068
109 npm notice created a lockfile as package-lock.json. You should commit this file.
110 npm WARN docker_web_app@1.0.0 No repository field.
111 npm WARN docker_web_app@1.0.0 No license field.
112
113 added 50 packages from 37 contributors and audited 50 packages in 1.62s
114
115 1 package is looking for funding
116   run `npm fund` for details
117
118 found 0 vulnerabilities
119
120 Removing intermediate container dce6fa7bc068
121 ---> 935f21809941
122 Step 5/7 : COPY . .
123 ---> 2cb039949400
124 Step 6/7 : EXPOSE 8080
125 ---> Running in 16d7d1efa461
126 Removing intermediate container 16d7d1efa461
127 ---> 41336e5c20a2
128 Step 7/7 : CMD [ "npm", "start" ]
129 ---> Running in 5f8d4911d04a
130 Removing intermediate container 5f8d4911d04a
131 ---> a5e607377b80
132 Successfully built a5e607377b80
133 Successfully tagged 232110768834.dkr.ecr.us-east-2.amazonaws.com/mynodeapp:latest
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135 [Container] 2022/01/04 11:17:47 Running command docker tag $REPOSITORY_URI:latest $REPOSITORY_URI:$IMAGE_TAG
136
137 [Container] 2022/01/04 11:17:48 Phase complete: BUILD State: SUCCEEDED
138 [Container] 2022/01/04 11:17:48 Phase context status code: Message:
139 [Container] 2022/01/04 11:17:48 Entering phase POST_BUILD
140 [Container] 2022/01/04 11:17:48 Running command echo Build completed on `date`
141 Build completed on Tue Jan 4 11:17:48 UTC 2022
142
143 [Container] 2022/01/04 11:17:48 Running command echo Pushing the Docker images...
144 Pushing the Docker images...
145
146 [Container] 2022/01/04 11:17:48 Running command docker push $REPOSITORY_URI:latest
147 The push refers to repository [232110768834.dkr.ecr.us-east-2.amazonaws.com/mynodeapp]
148 26be1c2f610a: Preparing
149 9c240075a6c2: Preparing
150 c234806490d4: Preparing
151 c7238b9bed9b: Preparing
152 8d57f55b8217: Preparing
153 4abc4549efbb: Preparing
154 d4cfcbee98ee: Preparing
155 2f48a5f89dc0: Preparing
156 d76a5d76b78d: Preparing
157 bae4fdae8c7d: Preparing
158 33b482d3030f: Preparing
159 870768294883: Preparing
160 f319319793e0: Preparing
161 4abc4549efbb: Waiting
162 d4cfcbee98ee: Waiting
163 2f48a5f89dc0: Waiting
164 d76a5d76b78d: Waiting
165 bae4fdae8c7d: Waiting
166 33b482d3030f: Waiting
167 870768294883: Waiting
168 f319319793e0: Waiting
169 c234806490d4: Pushed
170 c7238b9bed9b: Pushed
171 8d57f55b8217: Pushed
172 26be1c2f610a: Pushed
```

```
177 870768294883: Pushed
178 d4cfcbee98ee: Pushed
179 f319319793e0: Pushed
180 bae4fdae8c7d: Pushed
181 d76a5d76b78d: Pushed
182 latest: digest: sha256:136e1cdff0bc6f944e9a9251735d23f09ad475caacb9cfb5e1dd7adcde43340c size: 3048
183
184 [Container] 2022/01/04 11:18:19 Running command docker push $REPOSITORY_URI:$IMAGE_TAG
185 The push refers to repository [232110768834.dkr.ecr.us-east-2.amazonaws.com/mynodeapp]
186 26be1c2f610a: Preparing
187 9c240075a6c2: Preparing
188 c234806490d4: Preparing
189 c7238b9bed9b: Preparing
190 8d57f55b8217: Preparing
191 4abc4549efbb: Preparing
192 d4cfcbee98ee: Preparing
193 2f48a5f89dc0: Preparing
194 d76a5d76b78d: Preparing
195 bae4fdae8c7d: Preparing
196 33b482d3030f: Preparing
197 870768294883: Preparing
198 f319319793e0: Preparing
199 4abc4549efbb: Waiting
200 d4cfcbee98ee: Waiting
201 33b482d3030f: Waiting
202 2f48a5f89dc0: Waiting
203 d76a5d76b78d: Waiting
204 870768294883: Waiting
205 bae4fdae8c7d: Waiting
206 f319319793e0: Waiting
207 c234806490d4: Layer already exists
208 26be1c2f610a: Layer already exists
209 c7238b9bed9b: Layer already exists
210 8d57f55b8217: Layer already exists
211 9c240075a6c2: Layer already exists
212 4abc4549efbb: Layer already exists
213 d76a5d76b78d: Layer already exists
```

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207 c234806490d4: Layer already exists
208 26be1c2f610a: Layer already exists
209 c7238b9bed9b: Layer already exists
210 8d57f55b8217: Layer already exists
211 9c240075a6c2: Layer already exists
212 4abc4549efbb: Layer already exists
213 d76a5d76b78d: Layer already exists
214 2f48a5f89dc0: Layer already exists
215 d4cfcbee98ee: Layer already exists
216 bae4fdae8c7d: Layer already exists
217 870768294883: Layer already exists
218 f319319793e0: Layer already exists
219 33b482d3030f: Layer already exists
220 build-2d9fddb0-bc34-4357-acee-b32fa4095473: digest: sha256:136e1cdf0bc6f944e9a9251735d23f09ad475caacb9cfb5e1dd7adcde43340c size: 3048
221
222 [Container] 2022/01/04 11:18:20 Running command echo Writing image definitions file...
223 Writing image definitions file...
224
225 [Container] 2022/01/04 11:18:20 Running command printf '["name":"nodeapp","imageUri":"%s"]' $REPOSITORY_URI:$IMAGE_TAG > imagedefinitions.json
226
227 [Container] 2022/01/04 11:18:20 Running command cat imagedefinitions.json
228 [{"name":"nodeapp","imageUri":"232110768834.dkr.ecr.us-east-2.amazonaws.com/mynodeapp:build-2d9fddb0-bc34-4357-acee-b32fa4095473"}]
229 [Container] 2022/01/04 11:18:20 Phase complete: POST_BUILD State: SUCCEEDED
230 [Container] 2022/01/04 11:18:20 Phase context status code: Message:
231 [Container] 2022/01/04 11:18:20 Phase complete: UPLOAD_ARTIFACTS State: SUCCEEDED
232 [Container] 2022/01/04 11:18:20 Phase context status code: Message:
233
```