

Playwright with Python in AWS Lambda:

In server :

```
[] mkdir playwright
```

```
[] cd playwright
```

[] vi Dockerfile

```
FROM public.ecr.aws/lambda/python:3.8
```

```
# Install system dependencies
```

```
RUN yum install -y libX11 libXcomposite libXcursor libXdamage libXext  
libXi libXrandr libXrender libXtst cups-libs libXScrnSaver libXau libXdmcp  
liberation-fonts
```

```
# Install Node.js and npm
```

```
RUN curl -sL https://rpm.nodesource.com/setup_14.x | bash -
```

RUN `yum install -y nodejs`

Install Playwright

RUN `npm install -g playwright`

Copy your function code

COPY `app.py` `${LAMBDA_TASK_ROOT}`

Set the handler environment variable

ENV HANDLER `app.handler`

Set the timeout

ENV `AWS_LAMBDA_FUNCTION_TIMEOUT` 300

Run the Lambda handler

CMD `["app.handler"]`

[] vi app.py

```
from playwright.sync_api import sync_playwright
```

```
def handler(event, context):
```

```
    with sync_playwright() as p:
```

```
        browser = p.chromium.launch(args=["--disable-gpu", "--single-  
process"])
```

```
        page = browser.new_page()
```

```
        page.goto("http://whatsmyuseragent.org/")
```

```
        print("finished")
```

```
        browser.close()
```

[] docker build – t my-lambda-function:latest .

[] docker images

Docker image to AWS ECR:

[] we need create ECR and IAM users and iam police permission and iam we need create access key

To create access key and secret key

- [] in iam
- [] select users
- [] select which user want
- [] select security credentials
- [] scroll down
- [] select **create access key**
- [] select **command line interface**
- [] select confirm
- [] next
- [] type description
- [] create access key
- [] download the .csv there we get keys / we can copy and paste the keys

we need give ECR full access permission for docker push

[] Open the AWS Management Console and navigate(search) to the IAM service.

[] Locate and select the IAM user to which you want to attach the policy.

[] In the user scroll down to the "**Permissions**" section.

[] in "**add permissions**" Click on the "**Add inline policy**" button .

In the policy editor, choose the "**JSON**" tab to enter the policy code.

Replace the existing policy code with the JSON code provided earlier

```
{"Version": "2012-10-17",
```

```
"Statement": [
```

```
{
```

```
"Effect": "Allow",
```

```
"Action":
```

```
["ecr:*"],
```

```
"Resource": "*" ]}]
```

[] next

[] Provide a name for the policy in the "**Name**" field.

[] Click on "**Review policy**" to verify the policy details.

[] Finally, click on "**Create policy**" or "**Attach policy**" to attach the policy to the IAM user or role

In server

[] sudo su -

[] apt-get update

```
[ ] apt-get install awscli
```

```
[ ] apt install awscli
```

```
[ ] apt install dnf
```

```
[ ] aws --version
```

```
[ ] aws_access_key_id=<access key> /
```

```
[ ] export AWS_ACCESS_KEY_ID=AKIASM6XNBZOTMTK2XXB
```

```
[ ] aws_secret_access_key = <secret key> /
```

```
[ ] export AWS_SECRET_ACCESS_KEY=2k6RBd5B42CGuzA8XFulhhte13V
```

```
[ ] aws ecr get-login-password --region region | docker login --username AWS --password-stdin aws_account_id.dkr.ecr.region.amazonaws.com
```

Region ---> which region we selected that one (ex us-east-1)

aws_account_id----> account id (165271113309)

```
Ex [ ] aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 165271113309.dkr.ecr.us-east-1.amazonaws.com
```

```
[ ] docker images
```

```
[ ] docker tag <image_name>: <tag>
```

```
<aws_account_id>.dkr.ecr.<region>.amazonaws.com/ <image_name>: <tag>
```

```
Ex [ ] docker tag my-lambda-function:latest 165271113309.dkr.ecr.us-east-1.amazonaws.com/playwright:latest (ECR url )
```

```
[ ] docker push <aws_account_id>.dkr.ecr.<region>.amazonaws.com/ <image_name>: <tag>
```

```
Ex [ ] docker push 165271113309.dkr.ecr.us-east-1.amazonaws.com/playwright:latest
```

```
[ ] docker pull ECR URL
```

```
Ex [ ] docker pull 165271113309.dkr.ecr.us-east-1.amazonaws.com/playwright:latest
```

#Build

```
[] docker build -t my-lambda-function .
```

#Tag image

```
[] docker tag my-lambda-function:latest <aws-acc-id>.dkr.ecr.<aws-region>.amazonaws.com/my-lambda-function:latest
```

Login to amazon ECR

```
[]aws ecr get-login-passwd --region <aws-region> | docker login --username AWS --password-stdin <aws-acc-id>.dkr.ecr.<your-aws-region>.amazonaws.com/my-lambda-function
```

push image to Amazon ECR

```
[] docker push <your-aws-account-id>.dkr.ecr.<aws-region>.amazonaws.com/my-lambda-function:latest
```