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## Docker demo: Static web page with AWS ECS

This demos shows how to build a Docker container serving as a webserver. The webserver hosts a static webpage. Afterwards, we will push the Docker container to AWS. Finally, the Docker container used to launch an Amazon ECS cluster. But we can used Amazon SQS and Amazon EC2 to create a pipline.

- 1. First, (install and) activate Docker.
- 2. Generate the Dockerfile.

```
touch Dockerfile
```

Edit the file, e.g. with nano Dockerfile. An example can be found here.

3. Build and tag the Docker container:

```
docker build -t hello-world .
```

4. Test your container on localhost:

```
docker run -p 80:80 hello-world
```

- 5. Stop your running container:
  - docker ps to retrieve the contaibner-ID
  - docker stop container-ID
- 6. Create a AWS ECR repository via the CLI:

```
aws ecr create-repository -- repository-name hello-repository -- region eu-central-1
```

Change repository-name and region accordingly.

- 7. Copy uri to your clipboard.
- 8. Tag the Docker container for your respository:

```
docker tag hello-world XXX.dkr.ecr.eu-west-1.amazonaws.com/hello-
repository # XXX = your account-ID
```

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Change the uri accordingly.

9. Get temporary credentials for your repository via the CLI:

```
aws ecr get-login --no-include-email --region eu-west-1
```

Copy the output to your clipboard.

10. Push the Docker container to your repository:

```
docker push XXX.dkr.ecr.eu-west-1.amazonaws.com/hello-repository # XXX
= your account-ID
```

- 11. Go the ECS service. Click on Get started and choose Costum container. Set the port settings to 80.
- 12. After ECS deployed your application, get the DNS-Name of the deployed ELB (e.g. **EC2 console**). Paste it in to your browser tab.