



Deployment of Machine Learning Models

Section 12.9 Notes - Upload to AWS ECR

Commands

- cd into the cloned course repo root directory then
- Ensure PIP_EXTRA_INDEX_URL is set (Gemfury URL)
- Ensure AWS_ACCOUNT_ID is set (can be found in the AWS ECR URL)

Build image locally (Windows):

```
docker build --build-arg  
PIP_EXTRA_INDEX_URL=%PIP_EXTRA_INDEX_URL% -t  
YOUR_APP_NAME:latest .
```

Build image locally (OS X / Linux):

```
docker build --build-arg  
PIP_EXTRA_INDEX_URL=${PIP_EXTRA_INDEX_URL} -t  
YOUR_APP_NAME:latest .
```

Tag local docker image (Windows):

```
docker tag YOUR_APP_NAME:latest %AWS_ACCOUNT_ID%.dkr.ecr.us-  
east-1.amazonaws.com/YOUR_APP_NAME:latest
```

Tag local docker image (OS X / Linux):

```
docker tag YOUR_APP_NAME:latest ${AWS_ACCOUNT_ID}.dkr.ecr.us-  
east-1.amazonaws.com/YOUR_APP_NAME:latest
```

View Images and Tags:

```
docker images
```

Login to ECR:

```
aws ecr get-login --no-include-email --region us-east-1
```

Copy and paste the result of this command into the command prompt / terminal and run the command - you should see "login succeeded"

Push docker image to ECR (Windows)

```
docker push %AWS_ACCOUNT_ID%.dkr.ecr.us-east-  
1.amazonaws.com/YOUR_APP_NAME:latest
```



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```
docker push ${AWS_ACCOUNT_ID}.dkr.ecr.us-east-1.amazonaws.com/YOUR_APP_NAME:latest
```

Links

AWS ECR User Guide:

<https://docs.aws.amazon.com/AmazonECR/latest/userguide/what-is-ecr.html>

Create ECR entry with CLI:

<https://docs.aws.amazon.com/cli/latest/reference/ecr/create-repository.html>

More CLI commands:

https://docs.aws.amazon.com/AmazonECR/latest/userguide/ECR_AWSCLI.html#AWSCLI_push_image