S3 URL:
https://s3.amazonaws.com/aws-machine-learning-blog/artifacts/sagemaker-ml-workflow-with-apache-airflow/v1/cfn/airflow-ec2-2.0.2-RDS.yaml

Airflow web UI: http://ec2-35-88-73-113.us-west-2.compute.amazonaws.com:8080.

Type the `aws iam list-groups` command to list the user groups in your AWS account and confirm the user group was created.


```
{
    "Groups": [
        {
            "Path": "/",
            "GroupName": "Administrators",
            "GroupId": "AGPAVMBJW37KRHN2C3LIS",
            "Arn": "arn:aws:iam::369454669781:group/Administrators",
            "CreateDate": "2022-04-14T16:35:23+00:00"
        }
    ]
}
AWS Access Key ID [****************CMHQ]: AKIAVMBJW37K3DWZCMHQ
AWS Secret Access Key [****************ChWm]:
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
Default region name [Global]: us-west-2
Default output format [parquet]: json
{
    "AttachedPolicies": [
        {
            "PolicyName": "AdministratorAccess",
            "PolicyArn": "arn:aws:iam::aws:policy/AdministratorAccess"
        }
    ]
}

aws iam get-policy --policy-arn arn:aws:iam::aws:policy/AdministratorAccess
{
    "Policy": {
        "PolicyName": "AdministratorAccess",
        "PolicyId": "ANPAIWMBCKSKIEE64ZLYK",
        "Arn": "arn:aws:iam::aws:policy/AdministratorAccess",
        "Path": "/",
        "DefaultVersionId": "v1",
        "AttachmentCount": 1,
        "PermissionsBoundaryUsageCount": 0,
        "IsAttachable": true,
        "Description": "Provides full access to AWS services and resources.",
```

```
        "CreateDate": "2015-02-06T18:39:46+00:00",
        "UpdateDate": "2015-02-06T18:39:46+00:00",
        "Tags": []
    }
}
```

AIM ARN ROLE:
arn:aws:iam::369454669781:role/service-role/AmazonSageMaker-ExecutionRole-20220415T151752

```
Neptune: run = neptune.init(project='marfappv/data-eng-ind')
pip install neptune-client
import neptune.new as neptune

run = neptune.init(
    project="marfappv/data-eng-ind",

api_token="eyJhcGlfYWRkcmVzcyI6Imh0dHBzOi8vYXBwLm5lcHR1bmUuYWkiLCJhcGlfdXJsIjoiaHR0cHM6Ly9hcHAubmVwdHVuZS5haSIsImFwaV9rZXkiOiIyNGJmODc1MC0yMWJmLTQ0ZDAtYjAzOC02NTdhN2RlNTE0YzEifQ==",
)  # your credentials

params = {"learning_rate": 0.001, "optimizer": "Adam"}
run["parameters"] = params

for epoch in range(10):
    run["train/loss"].log(0.9 ** epoch)

run["eval/f1_score"] = 0.66

run.stop()

python train.py
```

Register and track ML models:

```
import neptune.new as neptune
model = neptune.init_model(
    name="Prediction model",
    key="MOD",
    project="marfappv/data-eng-ind",

api_token="eyJhcGlfYWRkcmVzcyI6Imh0dHBzOi8vYXBwLm5lcHR1bmUuYWkiLCJhcGlfdXJsIjoiaHR0cHM6Ly9hcHAubmVwdHVuZS5haSIsImFwaV9rZXkiOiIyNGJmODc1MC0yMWJmLTQ0ZDAtYjAzOC02NTdhN2RlNTE0YzEifQ==", # your credentials
)
```