

ConfigMap 생성

kubectl create configmap hello-cm --from-literal=language=java

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl get configmap
NAME          DATA   AGE
kube-root-ca.crt  1       7h16m
root@labs-910775232:/home/project/container-orchestration/yaml/configmap#
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl create configmap hello-cm --from-literal=language=java
configmap/hello-cm created
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl get cm
NAME          DATA   AGE
hello-cm      1       8s
kube-root-ca.crt  1       7h16m
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl get configmap
NAME          DATA   AGE
hello-cm      1       15s
kube-root-ca.crt  1       7h16m
```

kubectl get cm hello-cm -o yaml

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl get cm hello-cm -o yaml
apiVersion: v1
data:
  language: java
kind: ConfigMap
metadata:
  creationTimestamp: "2022-03-17T07:48:02Z"
  managedFields:
  - apiVersion: v1
    fieldsType: FieldsV1
    fieldsV1:
      f:data:
        .: {}
      f:language: {}
    manager: kubectl
    operation: Update
    time: "2022-03-17T07:48:02Z"
  name: hello-cm
  namespace: default
  resourceVersion: "65051"
  uid: 9af84949-9f64-4e6d-a294-4732832cfdce
root@labs-910775232:/home/project/container-orchestration/yaml/configmap#
```

마이크로서비스 빌드/배포 (AWS)

도커이미지 빌드 & Push

```
docker build -t 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox:v1 .
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# docker build -t 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/cm-sandbox:v1 .
Sending build context to Docker daemon 5.632 kB
Step 1/4 : FROM node:carbon
carbon: Pulling from library/node
146bd6a88618: Pull complete
9935d0c62ace: Pull complete
db0efb86e806: Pull complete
e705a4c4fd31: Extracting [=====>] 30.41 MB/50.07 MB
c877b722db6f: Download complete
645c20ec8214: Download complete
db8fbd9db2fe: Download complete
1c151cd1b3ea: Download complete
fbd993995f40: Download complete
```

```
aws ecr create-repository --repository-name user003-cm-sandbox --region ap-northeast-2
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# aws ecr create-repository --repository-name user003-cm-sandbox --region ap-northeast-2
{
  "repository": {
    "repositoryArn": "arn:aws:ecr:ap-northeast-2:979050235289:repository/user003-cm-sandbox",
    "registryId": "979050235289",
    "repositoryName": "user003-cm-sandbox",
    "repositoryUri": "979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox",
    "createdAt": "2022-03-17T08:00:52+00:00",
    "imageTagMutability": "MUTABLE",
    "imageScanningConfiguration": {
      "scanOnPush": false
    },
    "encryptionConfiguration": {
      "encryptionType": "AES256"
    }
  }
}
```

```
docker push 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox:v1
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# docker push 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/cm-sandbox:v1
The push refers to repository [979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/cm-sandbox]
1a890cec30de: Preparing
423451ed44f2: Preparing
b2aaf85d6633: Preparing
88601a85ce11: Preparing
42f9c2f9c08e: Preparing
99e8bd3efaaf: Preparing
bee1e39d7c3a: Waiting
1f59a4b2e206: Waiting
0ca7f54856c0: Waiting
ebb9ae013834: Preparing
no basic auth credentials
```

인증오류 발생

docker Login (ECR에 Push하기 위한 로그인 command)

```
docker login --username AWS -p $(aws ecr get-login-password --region ap-northeast-2) 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/
```

```
docker push 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox:v1
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# docker login --username AWS -p $(aws ecr get-login-password --region ap-northeast-2) 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/
Login Succeeded
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# docker push 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox:v1
The push refers to repository [979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox]
1a890cec30de: Pushed
423451ed44f2: Pushed
b2aaf85d6633: Pushed
88601a85ce11: Pushed
42f9c2f9c08e: Pushed
99e8bd3efaaf: Pushed
bee1e39d7c3a: Pushed
1f59a4b2e206: Pushed
0ca7f54856c0: Pushed
ebb9ae013834: Pushed
v1: digest: sha256:61fff7db77751245b6abe6cd0cffffa77914cfd8927b2d07fded3acef47646077 size: 2422
```

도커 로그인 후, push 성공

컨테이너 및 서비스 생성 (AWS)

cm-deployment.yaml 파일에서 Image 정보를 컨테이너 레지스트리 Push한 정보로 수정

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: cm-deployment
spec:
  replicas: 1
  minReadySeconds: 5
  selector:
    matchLabels:
      app: cm-literal
  template:
    metadata:
      name: cm-literal-pod
      labels:
        app: cm-literal
    spec:
      containers:
        - name: cm
          image: 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox:v1
          imagePullPolicy: Always
          ports:
            - containerPort: 8080
          env:
            - name: LANGUAGE
              valueFrom:
                configMapKeyRef:
                  name: hello-cm
                  key: language
```

```
kubectl create -f cm-deployment.yaml
```

```
kubectl create -f cm-service.yaml
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl create -f cm-deployment.yaml
deployment.apps/cm-deployment created
```

```
root@labs-910775232:/home/project/container-orchestration/yaml/configmap# kubectl create -f cm-service.yaml
service/cm-literal-svc created
```

AWS 콘솔에서 생성 된 것을 확인 가능

Amazon ECR > 리포지토리

Private

Public

프라이빗 리포지토리 (6)

🔄

푸시 명령 보기

삭제

편집

리포지토리 생성

🔍 리포지토리 찾기

< 1 > ⚙️

	리포지토리 이름 ▲	URI	생성 날짜 ▼	태그 변경 불가능	스캔 빈도	암호화 유형	풀스루 캐시
○	979050235289	📄 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/979050235289	2022년 3월 11일, 14:45:06 (UTC+09)	비활성화됨	푸시할 때 스캔	AES-256	비활성
○	user003-cm-sandbox	📄 979050235289.dkr.ecr.ap-northeast-2.amazonaws.com/user003-cm-sandbox	2022년 3월 17일, 17:00:52 (UTC+09)	비활성화됨	수동	AES-256	비활성