

# Deliverables

## 2. Screenshot of AWS CodeBuild pipeline

Developer Tools > CodeBuild > Build projects

**Build projects** Info 🔄 Actions ▾ Create trigger View details Start build ▾ **Create project**

🔍 Your projects ▾ < 1 > ⚙️

	Name ▾	Source provider	Repository	Latest build status	Description	Last Modified
<input type="radio"/>	<a href="#">coworking-analytics-build</a>	GitHub	<a href="#">eoaranda/cd12355-microservices-aws-kubernetes-project-starter</a> 🔗	✔ Succeeded	-	15 hours ago

Developer Tools > CodeBuild > Build projects > [coworking-analytics-build](#)

**coworking-analytics-build** Actions ▾ Create trigger Edit Clone Debug build Start build with overrides **Start build**

**Configuration**

Source provider GitHub	Primary repository <a href="#">eoaranda/cd12355-microservices-aws-kubernetes-project-starter</a> 🔗	Artifacts upload location -	Service role <a href="#">arn:aws:iam::816069130826:role/CodeBuild-CoworkingAnalyticsRole</a>
Public builds Disabled			

**Build history** 🔄 Stop build View artifacts View logs Delete builds Retry build < 1 > ⚙️

<input type="checkbox"/>	Build run	Status	Build number	Source version	Submitter	Duration	Completed
<input type="checkbox"/>	<a href="#">coworking-analytics-build:3c89fdb2-0ac2-4749-855c-8bee93e11289</a>	✔ Succeeded	5	e3dc5c8ba231d90472a0f5b453c6aeeba1d3f5d8	GitHub-Hookshot/8fe978d	1 minute 6 seconds	3 minutes ago
<input type="checkbox"/>	<a href="#">coworking-analytics-build:caf26fec-b7c8-4e67-85e9-563addfdb112</a>	✔ Succeeded	4	5820177928c9278749c89e2445132601aa123591	GitHub-Hookshot/8fe978d	1 minute 22 seconds	4 minutes ago

[coworking-analytics-](#)

## 3. Screenshot of AWS ECR repository for the application's repository

[Amazon ECR](#) > [Private registry](#) > Repositories

## Private repositories

Create repository

Repositories (1)

	Repository name ▲	URI	Created at ▼	Tag immutability	Encryption type
<input type="radio"/>	coworking-analytics	816069130826.dkr.ecr.us-east-1.amazonaws.com/coworking-analytics	November 15, 2024, 00:26:50 (UTC-05)	Mutable	AES-256

[Amazon ECR](#) > [Private registry](#) > [Repositories](#) > coworking-analytics

Images (3)

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Image tag ▼	Artifact type	Pushed at ▼	Size (MB) ▼	Image URI	Digest
coworking-analytics-5, latest	Image	November 15, 2024, 17:24:07 (UTC-05)	171.69	<input type="button" value="Copy URI"/>	<input type="button" value="Copy URI"/> sha256:7372728d9abd75...
coworking-analytics-4	Image	November 15, 2024, 17:22:46 (UTC-05)	171.69	<input type="button" value="Copy URI"/>	<input type="button" value="Copy URI"/> sha256:7c16eb729d0d64...
coworking-analytics-3	Image	November 15, 2024, 01:19:59 (UTC-05)	171.69	<input type="button" value="Copy URI"/>	<input type="button" value="Copy URI"/> sha256:bdd99e147a58a1...

#### 4. Screenshot of kubectl get svc

```
edgararanda@edgars-mbp deployment % kubectl get svc
NAME                TYPE          CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
coworking            LoadBalancer  10.100.144.201   aac20b299c1774d9ca80e8dfb3d19b5-751999043.us-east-1.elb.amazonaws.com  5153:32581/TCP   14h
kubernetes           ClusterIP     10.100.0.1       <none>            443/TCP          20h
postgresql-service   ClusterIP     10.100.91.121    <none>            5432/TCP         20h
edgararanda@edgars-mbp deployment %
```

#### 5. Screenshot of kubectl get pods

```
edgararanda@edgars-mbp deployment % kubectl get pods.
NAME                                READY   STATUS    RESTARTS   AGE
coworking-7d879bfc4c-mtpkz         1/1     Running   0          14h
postgresql-77d75d45d5-rw8hc       1/1     Running   0          20h
edgararanda@edgars-mbp deployment %
```

#### 6. Screenshot of kubectl describe svc <DATABASE\_SERVICE\_NAME>

```

edgararanda@edgars-mbp deployment % kubectl describe svc postgresql-service
Name:                postgresql-service
Namespace:           default
Labels:              <none>
Annotations:         <none>
Selector:            app=postgresql
Type:                ClusterIP
IP Family Policy:    SingleStack
IP Families:         IPv4
IP:                  10.100.91.121
IPs:                 10.100.91.121
Port:                <unset> 5432/TCP
TargetPort:          5432/TCP
Endpoints:           192.168.53.145:5432
Session Affinity:    None
Events:              <none>
edgararanda@edgars-mbp deployment %

```

## 7. Screenshot of kubectl describe deployment <SERVICE\_NAME>

```

edgararanda@edgars-mbp deployment % kubectl describe deployment coworking
Name:                coworking
Namespace:           default
CreationTimestamp:    Fri, 15 Nov 2024 01:48:58 -0500
Labels:              name=coworking
Annotations:         deployment.kubernetes.io/revision: 3
Selector:            service=coworking
Replicas:            1 desired | 1 updated | 1 total | 1 available | 0 unavailable
StrategyType:        RollingUpdate
MinReadySeconds:      0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels:             service=coworking
  Annotations:        kubectl.kubernetes.io/restartedAt: 2024-11-15T02:08:43-05:00
  Containers:
    coworking:
      Image:           816069130826.dkr.ecr.us-east-1.amazonaws.com/coworking-analytics:coworking-analytics-3
      Port:             <none>
      Host Port:        <none>
      Liveness:         http-get http://:5153/health_check delay=5s timeout=2s period=10s #success=1 #failure=3
      Readiness:        http-get http://:5153/readiness_check delay=5s timeout=5s period=10s #success=1 #failure=3
      Environment Variables from:
        coworking ConfigMap Optional: false
      Environment:
        DB_PASSWORD:    <set to the key 'DB_PASSWORD' in secret 'mypassword'> Optional: false
      Mounts:           <none>
      Volumes:          <none>
  Conditions:
    Type             Status    Reason
    -----
    Available         True     MinimumReplicasAvailable
    Progressing       True     NewReplicaSetAvailable
OldReplicaSets:      coworking-6c98c66d4c (0/0 replicas created), coworking-7678997f9d (0/0 replicas created)
NewReplicaSet:       coworking-7d879bfc4c (1/1 replicas created)
Events:              <none>
edgararanda@edgars-mbp deployment %

```

## 9. Screenshot of AWS CloudWatch logs for the application

Note: For CloudWatch logs to show I needed to call the API endpoint first.

```
3:39.759382","visits":6},"464":{"joined_at":"2022-12-15 00:23:39.759385","visits":4},"465":{"joined_at":"2023-02-03 04:23:39.759389","visits":7},"466
","2022-12-16 21:23:39.759392","visits":3},"467":{"joined_at":"2022-12-29 00:23:39.759395","visits":3},"468":{"joined_at":"2023-01-16 16:23:39.759399
","469":{"joined_at":"2022-12-15 14:23:39.759402","visits":3},"470":{"joined_at":"2023-02-09 20:23:39.759405","visits":7},"471":{"joined_at":"2023-02-
59409","visits":5},"472":{"joined_at":"2022-12-16 20:23:39.759412","visits":6},"473":{"joined_at":"2023-02-06 03:23:39.759415","visits":7},"474":{"jo
2-12-25 20:23:39.759418","visits":4},"475":{"joined_at":"2023-01-18 02:23:39.759422","visits":7},"476":{"joined_at":"2023-01-05 01:23:39.759425","vis
":{"joined_at":"2023-01-23 22:23:39.759428","visits":10},"478":{"joined_at":"2022-12-25 20:23:39.759432","visits":7},"479":{"joined_at":"2022-12-30 1
5","visits":4},"480":{"joined_at":"2023-01-19 23:23:39.759438","visits":4},"481":{"joined_at":"2023-01-19 02:23:39.759442","visits":7},"482":{"joined
-06 11:23:39.759445","visits":8},"483":{"joined_at":"2023-02-10 02:23:39.759448","visits":3},"484":{"joined_at":"2023-01-20 22:23:39.759451","visits
oined_at":"2023-02-09 13:23:39.759455","visits":12},"486":{"joined_at":"2023-01-22 10:23:39.759458","visits":5},"487":{"joined_at":"2022-12-20 17:23:
isits":10},"488":{"joined_at":"2022-12-27 18:23:39.759464","visits":5},"489":{"joined_at":"2023-01-10 05:23:39.759468","visits":8},"490":{"joined_at"
02:23:39.759471","visits":6},"491":{"joined_at":"2023-02-09 21:23:39.759474","visits":3},"492":{"joined_at":"2022-12-25 01:23:39.759478","visits":4},
d_at":"2023-02-09 01:23:39.759481","visits":3},"494":{"joined_at":"2022-12-24 11:23:39.759484","visits":4},"495":{"joined_at":"2023-01-03 23:23:39.75
","5","496":{"joined_at":"2022-12-17 19:23:39.759491","visits":5},"497":{"joined_at":"2023-01-25 01:23:39.759494","visits":8},"498":{"joined_at":"2023
39.759498","visits":12},"499":{"joined_at":"2023-01-19 00:23:39.759501","visits":4},"500":{"joined_at":"2022-12-23 12:23:39.759504","visits":5}}
edgararanda@gdgars-mbp deployment % curl aac20b299c1774d9ca80e8dfcb3d19b5-751999043.us-east-1.elb.amazonaws.com:5153/api/reports/daily usage
{"2023-02-07":40,"2023-02-08":202,"2023-02-09":179,"2023-02-10":158,"2023-02-11":146,"2023-02-12":176,"2023-02-13":196,"2023-02-14":142}
edgararanda@gdgars-mbp deployment % curl aac20b299c1774d9ca80e8dfcb3d19b5-751999043.us-east-1.elb.amazonaws.com:5153/api/reports/daily usage
{"2023-02-07":40,"2023-02-08":202,"2023-02-09":179,"2023-02-10":158,"2023-02-11":146,"2023-02-12":176,"2023-02-13":196,"2023-02-14":142}
edgararanda@gdgars-mbp deployment %
```

CloudWatch > Log groups

**Log groups (5)** Actions View in Logs Insights Start tailing Create log group

By default, we only load up to 10000 log groups.

☐ Exact match < 1 > ⚙️

<input type="checkbox"/>	Log group	Log class	Anomaly d...	Data prot...	Sensitive ...	Retention	Metric fit...
<input type="checkbox"/>	<a href="#">/aws/codebuild/coworking-analytics-build</a>	Standard	<a href="#">Configure</a>	-	-	<a href="#">Never expire</a>	-
<input type="checkbox"/>	<a href="#">/aws/containerinsights/my-cluster/application</a>	Standard	<a href="#">Configure</a>	-	-	<a href="#">Never expire</a>	-
<input type="checkbox"/>	<a href="#">/aws/containerinsights/my-cluster/dataplane</a>	Standard	<a href="#">Configure</a>	-	-	<a href="#">Never expire</a>	-
<input type="checkbox"/>	<a href="#">/aws/containerinsights/my-cluster/host</a>	Standard	<a href="#">Configure</a>	-	-	<a href="#">Never expire</a>	-
<input type="checkbox"/>	<a href="#">/aws/containerinsights/my-cluster/performance</a>	Standard	<a href="#">Configure</a>	-	-	<a href="#">Never expire</a>	-

CloudWatch > Log groups > /aws/containerinsights/my-cluster/app... > ip-192-168-56-80.ec2.internal-application.var.log.containers.cloudwatch-agent-b5st4\_amazon-cloudwatch\_otc-container...

**Log events** Actions Start tailing Create metric filter

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Clear 1m 30m 1h 12h Custom Local timezone Display ⚙️

▶	Timestamp	Message
		No more records within selected time range <a href="#">Retry</a>
▼	2024-11-15T16:22:21.759-05:00	<pre>{"time": "2024-11-15T21:22:21.759082964Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:22:21Z I! {\\"caller\\":\\"internal/transaction..."  {   "time": "2024-11-15T21:22:21.759082964Z",   "stream": "stderr",   "p": "F",   "log": "2024-11-15T21:22:21Z W! {\\"caller\\":\\"internal/transaction.go:125\\",\\"msg\\":\\"Failed to scrape Prometheus endpoint\\",\\"kind\\":\\"receiver\\",\\"name\\":\\"awscontainerinsightreceiver\\",\\"data_type\\":\\"metrics\\",\\"scrape_timestamp\\":1731705741752,\\"target_labels\\":\\" {\\_name_\\":\\"up\\",\\"instance\\":\\"dcm-exporter-service.amazon-cloudwatch.svc:9400\\",\\"job\\":\\"containerInsightsDCMExporterScrape\\",\\"}\\",   "kubernetes": {     "pod_name": "cloudwatch-agent-b5st4",     "namespace_name": "amazon-cloudwatch",     "pod_id": "14d66662-cd95-44e1-b009-5d67f7f35196",     "host": "ip-192-168-56-80.ec2.internal",     "container_name": "otc-container",     "docker_id": "d0831293111699e8fa7de9a59da95f4da594de640b03cd55ac8082cba00329d",     "container_hash": "602401143452.dkr.ecr.us-east-1.amazonaws.com/eks/observability/cloudwatch- agent@sha256:f3427f46e4a7de9c2e6009ab7955924ed0d454e6e021cff729ff7f9d24f13555b",     "container_image": "602401143452.dkr.ecr.us-east-1.amazonaws.com/eks/observability/cloudwatch-agent:1.300049.1b929"   } }</pre>
▶	2024-11-15T16:22:22.325-05:00	<pre>{"time": "2024-11-15T21:22:22.325097682Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:22:22Z I! {\\"caller\\":\\"awssemfexporter@v0.103...</pre>
▶	2024-11-15T16:22:30.785-05:00	<pre>{"time": "2024-11-15T21:22:30.785133482Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:22:30Z I! {\\"caller\\":\\"k8sapiserver/k8sapis...</pre>
▶	2024-11-15T16:22:32.328-05:00	<pre>{"time": "2024-11-15T21:22:32.328101325Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:22:32Z I! {\\"caller\\":\\"awssemfexporter@v0.103...</pre>
▶	2024-11-15T16:23:08.231-05:00	<pre>{"time": "2024-11-15T21:23:08.231019056Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:23:08Z W! {\\"caller\\":\\"internal/transaction...</pre>
▶	2024-11-15T16:23:12.423-05:00	<pre>{"time": "2024-11-15T21:23:12.423289292Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:23:12Z I! {\\"caller\\":\\"awssemfexporter@v0.103...</pre>
▶	2024-11-15T16:23:17.424-05:00	<pre>{"time": "2024-11-15T21:23:17.424804347Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:23:17Z I! {\\"caller\\":\\"awssemfexporter@v0.103...</pre>
▶	2024-11-15T16:23:21.755-05:00	<pre>{"time": "2024-11-15T21:23:21.755275405Z", "stream": "stderr", "p": "F", "log": "2024-11-15T21:23:21Z W! {\\"caller\\":\\"internal/transaction...</pre>