11 - Kubernetes on AWS - EKS

Exercises for Module "Kubernetes on AWS"

► Solution 1: Create EKS cluster

EXERCISE 1: Create EKS cluster You decide to create an EKS cluster - the managed Kubernetes Service of AWS. To simplify the whole creation and configurations, you use eksctl.

• With eksctl you create an EKS cluster with 3 Nodes and 1 Fargate profile

```
brew install weaveworks/tap/eksctl
Running `brew update --auto-update`..
aws configure list
    Name
                    Value
                                Type
                                      Location
  profile
                 <not set>
                                None
                                      None
access_key
         secret_key
               eu-central-1 config-file ~/.aws/config
  region
```

```
eksctl create cluster \
--name demo-cluster \
--version 1.17 \
--region eu-west-3 \
--nodegroup-name demo-nodes \
--node-type t2.micro \
--nodes 2 \
--nodes-min 1 \
--nodes-max 3
!!! Without region the request was failed.
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% eksctl create cluster --name=my-test-cluster --nodes=3 --region=eu-
central-1 -- kubeconfig=./kubeconfig.my-cluster.yaml
2024-01-23 16:53:05 [i] eksctl version 0.167.0
2024-01-23 16:53:05 [i] using region eu-central-1
2024-01-23 16:53:05 [i] setting availability zones to [eu-central-1a eu-
central-1b eu-central-1c]
2024-01-23 16:53:05 [i] subnets for eu-central-1a - public:192.168.0.0/19
private:192.168.96.0/19
2024-01-23 16:53:05 [i] subnets for eu-central-1b -
public:192.168.32.0/19 private:192.168.128.0/19
```

```
2024-01-23 16:53:05 [i] subnets for eu-central-1c -
public:192.168.64.0/19 private:192.168.160.0/19
2024-01-23 16:53:05 [i] nodegroup "ng-19e2f801" will use ""
[AmazonLinux2/1.27]
2024-01-23 16:53:05 [i] using Kubernetes version 1.27
2024-01-23 16:53:05 [i] creating EKS cluster "my-test-cluster" in "eu-
central-1" region with managed nodes
2024-01-23 16:53:05 [i] will create 2 separate CloudFormation stacks for
cluster itself and the initial managed nodegroup
2024-01-23 16:53:05 [i] if you encounter any issues, check CloudFormation
console or try 'eksctl utils describe-stacks -- region=eu-central-1 --
cluster=my-test-cluster'
2024-01-23 16:53:05 [i] Kubernetes API endpoint access will use default
of {publicAccess=true, privateAccess=false} for cluster "my-test-cluster"
in "eu-central-1"
2024-01-23 16:53:05 [i] CloudWatch logging will not be enabled for
cluster "my-test-cluster" in "eu-central-1"
2024-01-23 16:53:05 [i] you can enable it with 'eksctl utils update-
cluster-logging --enable-types={SPECIFY-YOUR-LOG-TYPES-HERE (e.g. all)} --
region=eu-central-1 --cluster=my-test-cluster'
2024-01-23 16:53:05 [i]
2 sequential tasks: { create cluster control plane "my-test-cluster",
   2 sequential sub-tasks: {
       wait for control plane to become ready,
       create managed nodegroup "ng-19e2f801",
   }
}
2024-01-23 16:53:05 [i] building cluster stack "eksctl-my-test-cluster-
cluster"
2024-01-23 16:53:06 [i]
                        deploying stack "eksctl-my-test-cluster-cluster"
2024-01-23 16:53:36 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:54:06 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:55:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:56:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:57:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:58:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 16:59:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 17:00:07 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 17:01:08 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-cluster"
2024-01-23 17:03:09 [i]
                         building managed nodegroup stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
2024-01-23 17:03:10 [i]
                        deploying stack "eksctl-my-test-cluster-
nodegroup-ng-19e2f801"
2024-01-23 17:03:10 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
```

```
2024-01-23 17:03:40 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
2024-01-23 17:04:30 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
2024-01-23 17:05:36 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
2024-01-23 17:06:51 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-nodegroup-ng-19e2f801"
2024-01-23 17:06:51 [i] waiting for the control plane to become ready
2024-01-23 17:06:53 [/] saved kubeconfig as "./kubeconfig.my-
cluster.yaml"
2024-01-23 17:06:53 [i] no tasks
2024-01-23 17:06:53 [✓] all EKS cluster resources for "my-test-cluster"
have been created
2024-01-23 17:06:58 [i] nodegroup "ng-19e2f801" has 3 node(s)
2024-01-23 17:06:58 [i] node "ip-192-168-25-127.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:58 [i] node "ip-192-168-36-54.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:58 [i] node "ip-192-168-66-166.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:58 [i] waiting for at least 3 node(s) to become ready in
"ng-19e2f801"
2024-01-23 17:06:58 [i] nodegroup "ng-19e2f801" has 3 node(s)
2024-01-23 17:06:58 [i] node "ip-192-168-25-127.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:58 [i] node "ip-192-168-36-54.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:58 [i] node "ip-192-168-66-166.eu-central-
1.compute.internal" is ready
2024-01-23 17:06:59 [i] kubectl command should work with
"./kubeconfig.my-cluster.yaml", try 'kubectl --kubeconfig=./kubeconfig.my-
cluster.vaml get nodes'
2024-01-23 17:06:59 [✓] EKS cluster "my-test-cluster" in "eu-central-1"
region is ready
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% eksctl create fargateprofile \
    --cluster my-test-cluster \
    --name my-fargate-profile \
    --namespace my-app
2024-01-23 17:09:27 [i] deploying stack "eksctl-my-test-cluster-fargate"
2024-01-23 17:09:27 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-fargate"
2024-01-23 17:09:57 [i] waiting for CloudFormation stack "eksctl-my-test-
cluster-fargate"
2024-01-23 17:09:58 [i] creating Fargate profile "my-fargate-profile" on
EKS cluster "my-test-cluster"
2024-01-23 17:12:08 [i] created Fargate profile "my-fargate-profile" on
EKS cluster "my-test-cluster"
```

```
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% export KUBECONFIG=kubeconfig.my-cluster.yaml
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl get node
                                               STATUS
NAME
                                                        ROLES
                                                                AGE
VERSION
ip-192-168-25-127.eu-central-1.compute.internal
                                               Ready
                                                        <none>
                                                                14m
v1.27.9-eks-5e0fdde
ip-192-168-36-54.eu-central-1.compute.internal
                                                                14m
                                               Ready
                                                        <none>
v1.27.9-eks-5e0fdde
ip-192-168-66-166.eu-central-1.compute.internal
                                                                14m
                                               Ready
                                                        <none>
v1.27.9-eks-5e0fdde
sqworker@MacBook-Pro-3.local /Users/sqworker/Desktop/aws examples/eks-
exercises/k8s-deployment [feature/solutions]
% eksctl get fargateprofile --cluster my-test-cluster
NAME
               SUBNETS
                                          TAGS
                                                 STATUS
my-fargate-profile my-app
                                  <none>
arn:aws:iam::524196012679:role/eksctl-my-test-cluster-farg-
FargatePodExecutionRole-6g8yyufsAeLL subnet-0195a02f726f55406, subnet-
0631a7beb86471b81,subnet-0eeb78d80ea08ae07 <none> ACTIVE
```

► Solution 2: Deploy Mysql and phpmyadmin

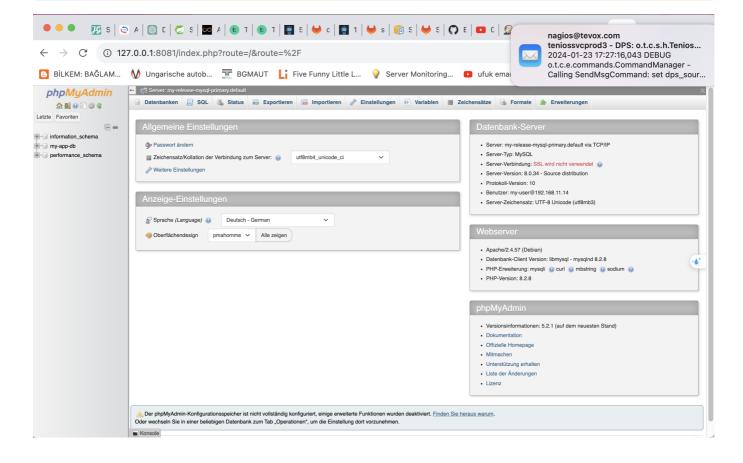
EXERCISE 2: Deploy Mysql and phpmyadmin You deploy mysql and phpmyadmin on EC2 nodes with the same setup as before.

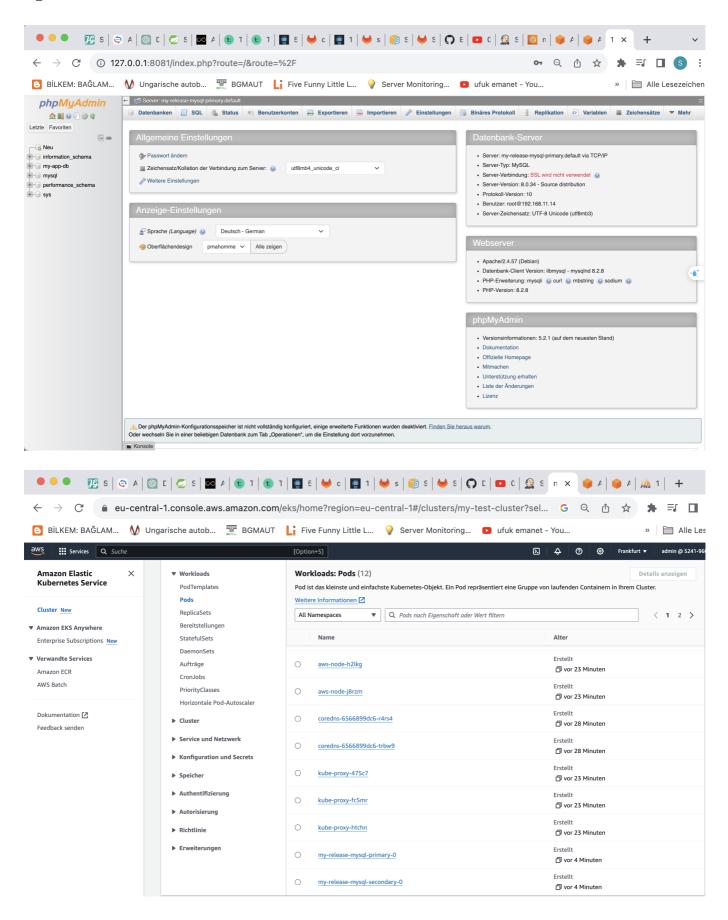
```
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% helm repo add bitnami https://charts.bitnami.com/bitnami
"bitnami" already exists with the same configuration, skipping

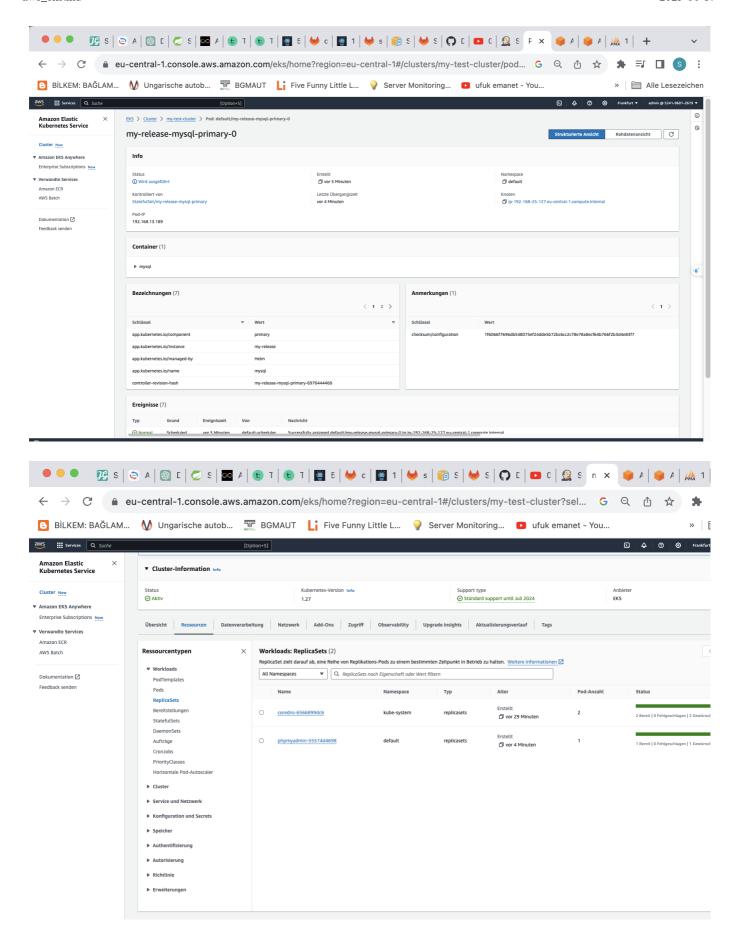
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% helm install my-release bitnami/mysql -f mysql-chart-values-eks.yaml
NAME: my-release
LAST DEPLOYED: Tue Jan 23 17:23:35 2024
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
```

```
NOTES:
CHART NAME: mysql
CHART VERSION: 9.12.0
APP VERSION: 8.0.34
** Please be patient while the chart is being deployed **
Tip:
  Watch the deployment status using the command: kubectl get pods -w --
namespace default
Services:
  echo Primary: my-release-mysql-primary.default.svc.cluster.local:3306
  echo Secondary: my-release-mysql-
secondary.default.svc.cluster.local:3306
Execute the following to get the administrator credentials:
  echo Username: root
  MYSQL_ROOT_PASSWORD=$(kubectl get secret --namespace default my-release-
mysql -o jsonpath="{.data.mysql-root-password}" | base64 -d)
To connect to your database:
  1. Run a pod that you can use as a client:
      kubectl run my-release-mysql-client --rm --tty -i --restart='Never'
--image docker.io/bitnami/mysql:8.0.34-debian-11-r31 --namespace default
--env MYSOL ROOT PASSWORD=$MYSOL ROOT PASSWORD --command -- bash
  2. To connect to primary service (read/write):
      mysql -h my-release-mysql-primary.default.svc.cluster.local -uroot -
p"$MYSQL_ROOT_PASSWORD"
  3. To connect to secondary service (read-only):
      mysql -h my-release-mysql-secondary.default.svc.cluster.local -uroot
-p"$MYSQL_ROOT_PASSWORD"
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl apply -f db-config.yaml
configmap/db-config created
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl apply -f db-secret.yaml
secret/db-secret created
sgworker@MacBook-Pro-3.local /Users/sgworker/Desktop/aws_examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl apply -f phpmyadmin.yaml
deployment.apps/phpmyadmin created
```

```
service/phpmyadmin-service created
sqworker@MacBook-Pro-3.local /Users/sqworker/Desktop/aws examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl port forward svc/phpmyadmin-service 8081:8081
error: unknown command "port" for "kubectl"
Did you mean this?
    port-forward
sqworker@MacBook-Pro-3.local /Users/sqworker/Desktop/aws examples/eks-
exercises/k8s-deployment [feature/solutions]
% kubectl port-forward svc/phpmyadmin-service 8081:8081
Forwarding from 127.0.0.1:8081 -> 80
Forwarding from [::1]:8081 -> 80
Handling connection for 8081
```







► Solution 3: Deploy your Java application

EXERCISE 3: Deploy your Java application You deploy your Java application using Fargate with 3 replicas and same setup as before

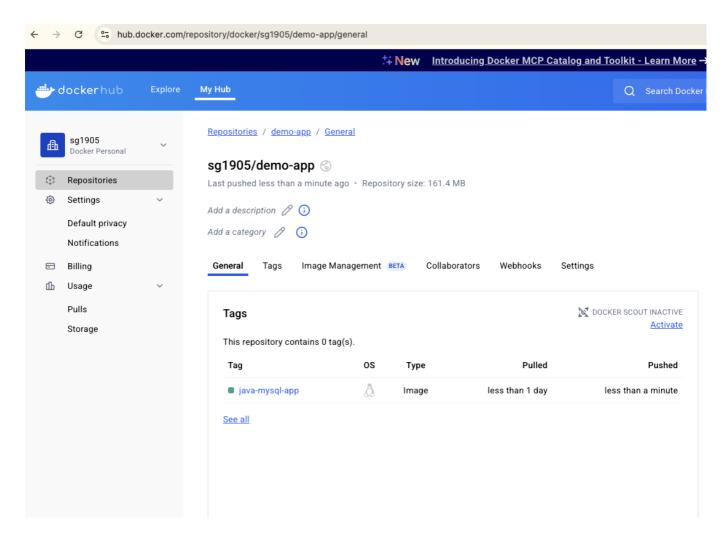
I have checked the Java app into my GitHub repo: https://github.com/Saban39/demo-app/tree/main/src/main
In the java-app.yaml deployment file, I configured my Docker Hub repository. Then I built the app, created the Docker image, and pushed it to Docker Hub. After that, I deployed it to my EKS cluster using the three Fargate profiles.

Step 1: In the first step, I built the application

```
DEBUGGING-KONSOLE PROBLEME ② AUSGABE PORTS MULTIPANE EXPLORER TERMINAL

% gradlew clean build
zsh: command not found: gradlew
sgworker@MacBook=Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises/eks-exercises [feature/solutions]
% gradle clean build
Deprecated Gradle features were used in this build, making it incompatible with Gradle 9.0.
You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.
For more on this, please refer to https://docs.gradle.org/8.10/userguide/command_line_interface.html#sec:command_line_warnings in the Gradle documentation.
BUILD SUCCESSFUL in 13s
8 actionable tasks: 8 executed
sgworker@MacBook=Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises/eks-exercises [feature/solutions]
```

Step 2: In the second step, I created the Docker image and pushed it to my own repository.



In the third step, I configured the secrets for my Docker repository and updated the deployment in javaapp.yaml.

```
Dockerfile
                   ks-exercises > k8s-deployment > ① README
     kubectl create namespace my-app
     # We now have to create all configuration and secrets for our java app in the my-app namespa
    # Create my-registry-key secret to pull image
 95 DOCKER_REGISTRY_SERVER="docker.io"
     DOCKER USER=
     DOCKER_EMAIL="sg1905w1@gmail.com"
 98
     DOCKER_PASSWORD=
     kubectl create secret -n my-app docker-registry my-registry-key \
     --docker-server=$DOCKER_REGISTRY_SERVER \
    --docker-username=$DOCKER_USER \
     --docker-password=$DOCKER_PASSWORD \
104
     --docker-email=$DOCKER_EMAIL
```

apiVersion: apps/v1
kind: Deployment
metadata:

name: java-app-deployment

labels:

```
app: java-app
spec:
 replicas: 3
  selector:
    matchLabels:
      app: java-app
 template:
    metadata:
      labels:
        app: java-app
    spec:
      imagePullSecrets:
      - name: my-registry-key
      containers:
      - name: javamysqlapp
        image: sg1905/demo-app:java-mysql-app
```

In the fourth step, I executed the following commands to deploy my application with 3 Fargate profiles:

```
kubectl apply -f db-secret.yaml -n my-app
kubectl apply -f db-config.yaml -n my-app
kubectl apply -f java-app.yaml -n my-app
```

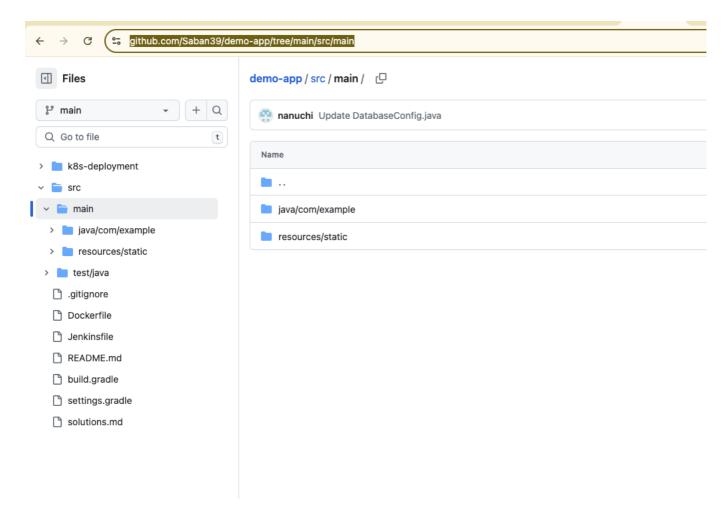
► Solution 4-5: Automate deployment

Setup Continuous Deployment with Jenkins and Use ECR as Docker repository

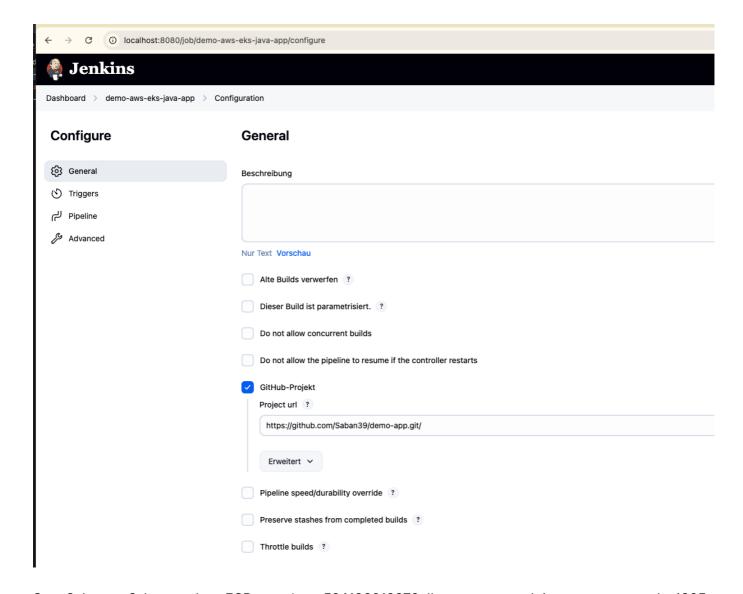
EXERCISE 4-5: Automate deployment Now your application is running. And when you or others make changes to it, Jenkins pipeline builds the new image, but you have to manually deploy it into the cluster. But you know how annoying that is for you and your team from experience, so you want to automate deploying to the cluster as well.

• Setup automatic deploying to the cluster in the pipeline.

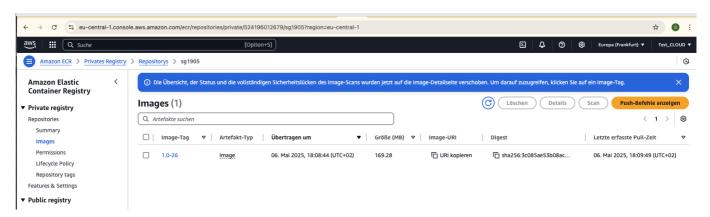
Step 1: First, I installed Jenkins locally on my Mac and checked the project into my GitHub repository, which also includes the Jenkinsfile.



Step 2: In the second step, I created the Jenkins project demo-aws-eks-java-app and connected it to my Git repository: https://github.com/Saban39/demo-app/



Step 3: In step 3, I created my ECR repository 524196012679.dkr.ecr.eu-central-1.amazonaws.com/sg1905.



Step 4: In step 4, I adjusted my Jenkinsfile for the ECR repository and created the credentials in Jenkins.

Jenkinsfile:

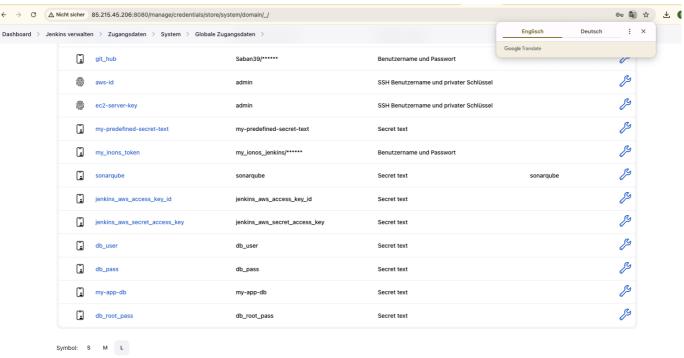
```
#!/usr/bin/env groovy

pipeline {
   agent any
   tools {
      gradle 'Gradle'
```

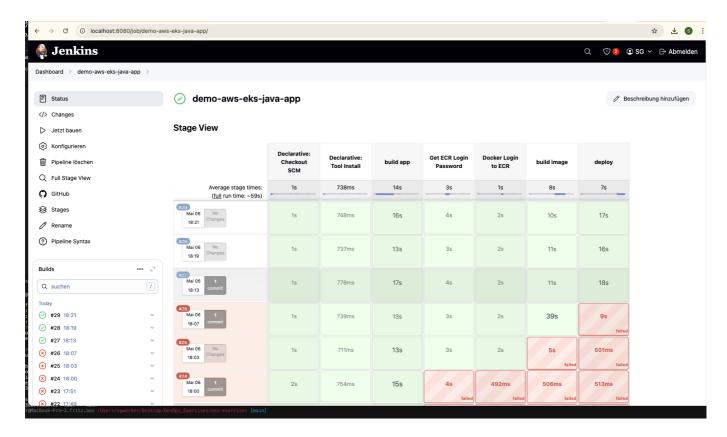
```
environment {
        ECR REPO URL = '524196012679.dkr.ecr.eu-central-
1.amazonaws.com/sg1905'
        IMAGE REPO = "${ECR REPO URL}"
        IMAGE NAME = "1.0-${BUILD NUMBER}"
        CLUSTER_NAME = "my-cluster"
        CLUSTER REGION = "eu-central-1"
        AWS_ACCESS_KEY_ID = credentials('jenkins_aws_access_key_id')
        AWS_SECRET_ACCESS_KEY =
credentials('jenkins_aws_secret_access_key')
        PATH =
"/Users/sgworker/.docker/bin:/usr/local/bin:/usr/bin:/bin:/usr/sbin:/sbin"
       DOCKER HOST = "unix:///Users/sgworker/.docker/run/docker.sock"
   }
   stages {
        stage('build app') {
            steps {
               script {
                   echo "building the application..."
                   sh 'gradle clean build'
               }
            }
        }
        stage('Get ECR Login Password') {
            steps {
                script {
                    try {
                        // Print environment variables for debugging
purposes
                        echo "ECR Region: $CLUSTER_REGION"
                        echo "ECR Repo URL: $ECR_REPO_URL"
                        // Run the AWS CLI command to get the login
password
                        def password = sh(script: "aws ecr get-login-
password --region $CLUSTER_REGION", returnStdout: true).trim()
                        // Store the password in the environment variable
                        env_ECR_PASSWORD = password
                        // Print the obtained password (avoid printing the
actual password in production)
                        echo "Successfully retrieved the ECR login
password (printing only the length for debugging purposes):
${password.length()}"
                    } catch (Exception e) {
                        // Catch any errors and print them to help with
debugging
                        echo "Error during ECR password retrieval:
${e.getMessage()}"
```

```
currentBuild.result = 'FAILURE'
                        throw e
                    }
                }
            }
        }
        stage('Docker Login to ECR') {
            steps {
                script {
                    // Login to Docker using the password
                    sh "echo $ECR_PASSWORD | docker login --username AWS -
-password-stdin $ECR_REPO_URL"
                }
            }
        }
        stage('build image') {
            steps {
                script {
                    echo "building the docker image..."
                    sh "docker build -t ${IMAGE_REPO}:${IMAGE_NAME} ."
                    sh "docker push ${IMAGE_REPO}:${IMAGE_NAME}"
                }
            }
        }
        stage('deploy') {
            environment {
                APP_NAME = 'java-app'
                APP_NAMESPACE = 'my-app'
                DB_USER_SECRET = credentials('db_user')
                DB_PASS_SECRET = credentials('db_pass')
                DB_NAME_SECRET = credentials('db_name')
                DB_ROOT_PASS_SECRET = credentials('db_root_pass')
            }
            steps {
                script {
    // Define a kubeconfig path within the Jenkins workspace
    def kubeconfigPath = "${env.WORKSPACE}/.kube/config"
    // Ensure directory exists
    sh "mkdir -p ${env.WORKSPACE}/.kube"
    // Update kubeconfig with explicit path
    sh "aws eks update-kubeconfig --name ${CLUSTER_NAME} --region
${CLUSTER_REGION} --kubeconfig ${kubeconfigPath}"
    // Export secrets as base64 values
    env.DB_USER = sh(script: 'echo -n $DB_USER_SECRET | base64',
returnStdout: true).trim()
    env.DB_PASS = sh(script: 'echo -n $DB_PASS_SECRET | base64',
returnStdout: true).trim()
    env.DB_NAME = sh(script: 'echo -n $DB_NAME_SECRET | base64',
```

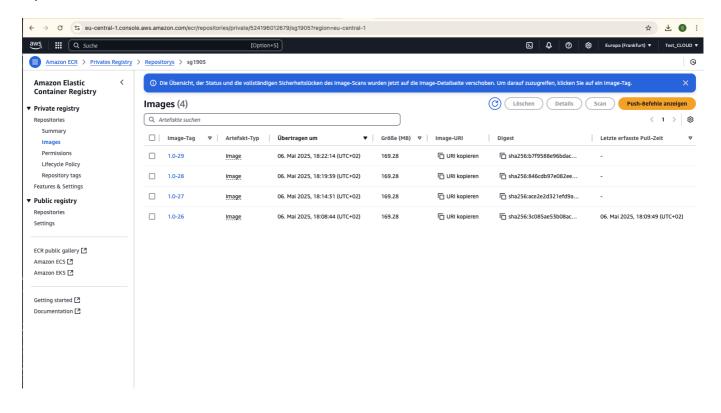
```
returnStdout: true).trim()
    env.DB_ROOT_PASS = sh(script: 'echo -n $DB_ROOT_PASS_SECRET | base64',
returnStdout: true).trim()
    echo 'deploying new release to EKS...'
    // Run kubectl commands using the correct kubeconfig
    sh "KUBECONFIG=${kubeconfiqPath} envsubst < k8s-deployment/java-app-
cicd.yaml | kubectl apply -f -"
    sh "KUBECONFIG=${kubeconfigPath} envsubst < k8s-deployment/db-config-</pre>
cicd.yaml | kubectl apply -f -"
    sh "KUBECONFIG=${kubeconfigPath} envsubst < k8s-deployment/db-secret-</pre>
cicd.yaml | kubectl apply -f -"
}
            }
        }
    }
}
```

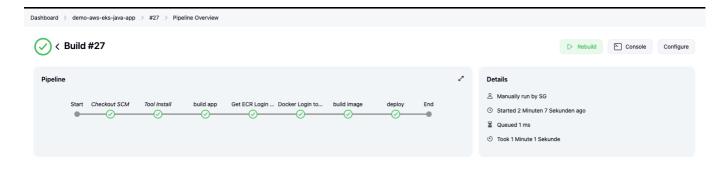


Step 5: In step 5, I ran my pipeline and it executed successfully. Before that, I had some issues, but after adjusting my Jenkinsfile, it completed successfully.



My artifacts on the ECR





everything was succesfully deployed on my eks cluster.

► Solution 6: Configure Autoscaling

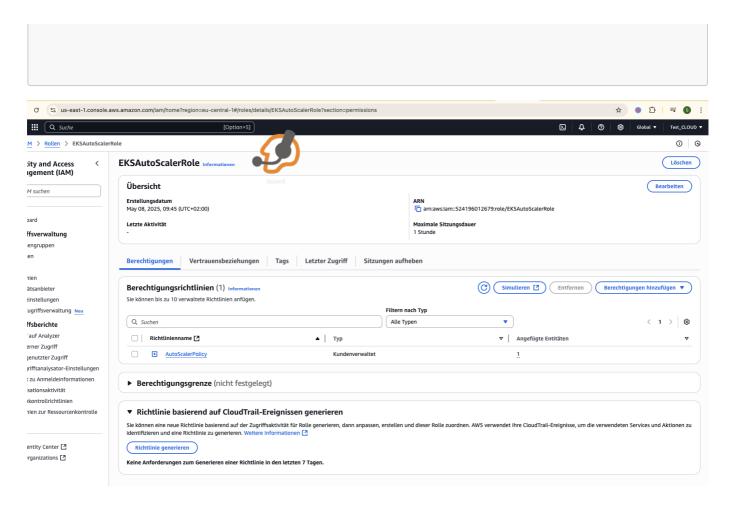
EXERCISE 6: Configure Autoscaling Now your application is running, whenever a change is made, it gets automatically deployed in the cluster etc. This is great, but you notice that most of the time the 3 nodes you have are underutilized, especially at the weekends, because your containers aren't using that much resources. However, your company is paying the full price for all the servers.

- So you suggest to your manager, that you will be able to save the company some infrastructure costs, by configuring autoscaling. Your manager is happy about that and asks you to configure it.
- So go ahead and configure autoscaling to scale down to minimum 1 node when servers are underutilized and maximum 3 nodes when in full use.

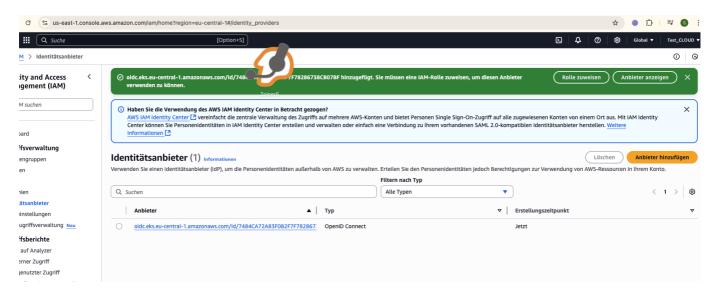
Step 1: In step 1, I first created the IAM policy and the role named EKSAutoScalerRole, as described in video 3.

arn:aws:iam::524196012679:role/EKSAutoScalerRole

```
AutoScalerPolicy
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Action": [
                "autoscaling:DescribeAutoScalingGroups",
                "autoscaling:DescribeAutoScalingInstances",
                "autoscaling:DescribeLaunchConfigurations",
                "autoscaling:DescribeScalingActivities",
                "autoscaling:SetDesiredCapacity",
                "autoscaling:TerminateInstanceInAutoScalingGroup",
                "ec2:DescribeInstanceTypes",
                "ec2:DescribeLaunchTemplateVersions"
            ],
            "Resource": "*",
            "Effect": "Allow"
        }
    ]
}
```



Step 2: In step 2, I created the OpenID provider.



Step 3: In step 3, I modified the cluster-autoscaler-autodiscover.yaml file with my data, as shown in the video and deployed in my-clsuter.

--apiVersion: v1
kind: ServiceAccount
metadata:
 labels:
 k8s-addon: cluster-autoscaler.addons.k8s.io
 k8s-app: cluster-autoscaler

```
name: cluster-autoscaler
  namespace: kube-system
  annotations:
    eks.amazonaws.com/role-arn:
arn:aws:iam::524196012679:role/EKSAutoScalerRole
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRole
metadata:
  name: cluster-autoscaler
  labels:
    k8s-addon: cluster-autoscaler.addons.k8s.io
    k8s-app: cluster-autoscaler
rules:
  - apiGroups: [""]
    resources: ["events", "endpoints"]
   verbs: ["create", "patch"]
  - apiGroups: [""]
    resources: ["pods/eviction"]
   verbs: ["create"]
  - apiGroups: [""]
    resources: ["pods/status"]
    verbs: ["update"]
  - apiGroups: [""]
    resources: ["endpoints"]
    resourceNames: ["cluster-autoscaler"]
    verbs: ["get", "update"]
  - apiGroups: [""]
    resources: ["nodes"]
    verbs: ["watch", "list", "get", "update"]
  - apiGroups: [""]
    resources:
     - "namespaces"
      - "pods"
     - "services"
      - "replicationcontrollers"
      - "persistentvolumeclaims"
      - "persistentvolumes"
    verbs: ["watch", "list", "get"]
  - apiGroups: ["extensions"]
    resources: ["replicasets", "daemonsets"]
    verbs: ["watch", "list", "get"]
  - apiGroups: ["policy"]
    resources: ["poddisruptionbudgets"]
    verbs: ["watch", "list"]
  - apiGroups: ["apps"]
    resources: ["statefulsets", "replicasets", "daemonsets"]
    verbs: ["watch", "list", "get"]
  - apiGroups: ["storage.k8s.io"]
    resources: ["storageclasses", "csinodes", "csidrivers",
"csistoragecapacities"]
    verbs: ["watch", "list", "get"]
  - apiGroups: ["batch", "extensions"]
```

```
resources: ["jobs"]
    verbs: ["get", "list", "watch", "patch"]
  - apiGroups: ["coordination.k8s.io"]
    resources: ["leases"]
    verbs: ["create"]
 - apiGroups: ["coordination.k8s.io"]
    resourceNames: ["cluster-autoscaler"]
    resources: ["leases"]
   verbs: ["get", "update"]
apiVersion: rbac.authorization.k8s.io/v1
kind: Role
metadata:
 name: cluster-autoscaler
 namespace: kube-system
  labels:
    k8s-addon: cluster-autoscaler.addons.k8s.io
    k8s-app: cluster-autoscaler
rules:
  - apiGroups: [""]
    resources: ["configmaps"]
   verbs: ["create", "list", "watch"]
  - apiGroups: [""]
    resources: ["configmaps"]
    resourceNames: ["cluster-autoscaler-status", "cluster-autoscaler-
priority-expander"]
    verbs: ["delete", "get", "update", "watch"]
apiVersion: rbac.authorization.k8s.io/v1
kind: ClusterRoleBinding
metadata:
 name: cluster-autoscaler
  labels:
    k8s-addon: cluster-autoscaler.addons.k8s.io
    k8s-app: cluster-autoscaler
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: ClusterRole
 name: cluster-autoscaler
subjects:
 - kind: ServiceAccount
    name: cluster-autoscaler
    namespace: kube-system
apiVersion: rbac.authorization.k8s.io/v1
kind: RoleBinding
metadata:
  name: cluster-autoscaler
 namespace: kube-system
  labels:
    k8s-addon: cluster-autoscaler.addons.k8s.io
    k8s-app: cluster-autoscaler
```

```
roleRef:
  apiGroup: rbac.authorization.k8s.io
  kind: Role
  name: cluster-autoscaler
subjects:
  - kind: ServiceAccount
    name: cluster-autoscaler
    namespace: kube-system
apiVersion: apps/v1
kind: Deployment
metadata:
  name: cluster-autoscaler
  namespace: kube-system
  labels:
    app: cluster-autoscaler
spec:
  replicas: 1
  selector:
    matchLabels:
      app: cluster-autoscaler
  template:
    metadata:
      labels:
        app: cluster-autoscaler
      annotations:
        prometheus.io/scrape: 'true'
        prometheus.io/port: '8085'
        cluster-autoscaler.kubernetes.io/safe-to-evict: "false"
    spec:
      priorityClassName: system-cluster-critical
      securityContext:
        runAsNonRoot: true
        runAsUser: 65534
        fsGroup: 65534
        seccompProfile:
          type: RuntimeDefault
      serviceAccountName: cluster-autoscaler
      containers:
        - image: registry.k8s.io/autoscaling/cluster-autoscaler:v1.27.8
          name: cluster-autoscaler
          env:
            - name: AWS_REGION
              value: "eu-central-1"
          resources:
            limits:
              cpu: 100m
              memory: 600Mi
            requests:
              cpu: 100m
              memory: 600Mi
          command:
```

```
- ./cluster-autoscaler
            - --v=4
            - --stderrthreshold=info
            - --cloud-provider=aws
            - --skip-nodes-with-local-storage=false
            - --expander=least-waste
            --balance-similar-node-groups
            - --skip-nodes-with-system-pods=false
            - --node-group-auto-discovery=asg:tag=k8s.io/cluster-
autoscaler/enabled, k8s.io/cluster-autoscaler/my-cluster
          volumeMounts:
            - name: ssl-certs
              mountPath: /etc/ssl/certs/ca-certificates.crt #
/etc/ssl/certs/ca-bundle.crt for Amazon Linux Worker Nodes
              readOnly: true
          imagePullPolicy: "Always"
          securityContext:
            allowPrivilegeEscalation: false
            capabilities:
              drop:
                - ALL
            readOnlyRootFilesystem: true
      volumes:
        - name: ssl-certs
          hostPath:
            path: "/etc/ssl/certs/ca-bundle.crt"
```

```
-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercis
 % kubectl get node
                                                                                                                                                                              STATUS
                                                                                                                                                                                                            ROLES
NAME
                                                                                                                                                                                                                                            AGE
                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                v1.27.16-eks-aeac579
v1.27.16-eks-aeac579
v1.27.16-eks-aeac579
 ip-192-168-17-5.eu-central-1.compute.internal
                                                                                                                                                                                                                                            43m
                                                                                                                                                                              Ready
                                                                                                                                                                                                            <none>
 ip-192-168-47-237.eu-central-1.compute.internal
ip-192-168-72-73.eu-central-1.compute.internal
                                                                                                                                                                              Ready
                                                                                                                                                                                                              <none>
                                                                                                                                                                              Ready
                                                                                                                                                                                                              <none>
 sgworker@MacBook-Pro-3.fritz.box /L
 sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
 sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
**Symbolic Grace Book - Pro - 3. fritz.box / Users/sgworker/Desktop/DevOps_Exercises  

* kubectl apply - f cluster-autoscaler-autodiscover.yaml  
serviceaccount/cluster-autoscaler created  
clusterrole.rbac.authorization  
**Post  
**Po
 clusterrole.rbac.authorization.k8s.io/cluster-autoscaler created
 role.rbac.authorization.k8s.io/cluster-autoscaler created
 clusterrolebinding.rbac.authorization.k8s.io/cluster-autoscaler created
 rolebinding.rbac.authorization.k8s.io/cluster-autoscaler created
 deployment.apps/cluster-autoscaler created
           orker@MacBook-Pro-3.fritz.box /L
```

```
53
            ****
                        PROBLEME 22
DEBUGGING-KONSOLE
                                           AUSGABE
                                                        PORTS
                                                                  MULTIPANE EXPLORER
                                                                                           TERMINAL
                                                           STATUS
                                                                      ROLES
                                                                                 AGE
                                                                                        VERSION
                                                                                        v1.27.16-eks-aeac579
v1.27.16-eks-aeac579
ip-192-168-17-5.eu-central-1.compute.internal
                                                                                 43m
                                                           Ready
                                                                      <none>
ip-192-168-47-237.eu-central-1.compute.internal
                                                                                 43m
                                                           Ready
                                                                      <none>
ip-192-168-72-73.eu-central-1.compute.internal
                                                                                 43m
                                                                                        v1.27.16-eks-aeac579
                                                           Ready
                                                                      <none>
sgworker@MacBook-Pro-3.fritz.box /Use
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop
% kubectl apply -f cluster-autoscaler-autodiscover.yaml
serviceaccount/cluster-autoscaler created
clusterrole.rbac.authorization.k8s.io/cluster-autoscaler created
role.rbac.authorization.k8s.io/cluster-autoscaler created clusterrolebinding.rbac.authorization.k8s.io/cluster-autoscaler created
rolebinding.rbac.authorization.k8s.io/cluster-autoscaler created
deployment.apps/cluster-autoscaler created
% kubectl get deployment —n kube—system
                        READY
                                  UP-TO-DATE
                                                  AVAILABLE
                                                                AGE
                        1/1
2/2
                                                                9m4s
cluster-autoscaler
coredns
                                                  2
                                                                57m
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop
```

```
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubectl get deployment –n kube-system
NAME READY UP-TO-DATE
                                            AVAILABLE
                                                          AGE
cluster-autoscaler
                      1/1
                                                          9m4s
                               1
                                            1
                      2/2
                                             2
                                                          57m
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubextl get pod -n kube-system
zsh: command not found: kubextl
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubectl get pod -n kube-system
                                        READY
                                                 STATUS
                                                            RESTARTS
                                                                       AGE
                                        2/2
aws-node-5scrb
                                                 Running
                                                                       56m
                                                            0
aws-node-mrlfs
                                                                       56m
                                        2/2
                                                 Running
                                                           0
aws-node-xb4c4
                                        2/2
                                                 Running
                                                            0
                                                                       56m
cluster-autoscaler-6768dd59d5-cfm9r
                                                 Running
                                        1/1
                                                           0
                                                                        12m
coredns-6566899dc6-58k2v
                                        1/1
                                                 Running
                                                            0
                                                                       60m
coredns-6566899dc6-vwpsc
                                        1/1
                                                                       60m
                                                 Running
                                                            0
kube-proxy-5d4hg
                                        1/1
                                                 Running
                                                            0
                                                                       56m
                                                                        56m
kube-proxy-drmjm
                                        1/1
                                                 Running
                                                            0
kube-proxy-sr5wp
                                        1/1
                                                 Running
                                                           0
                                                                       56m
sgworker@MacBook-Pro-3.fritz.box /Users/
```

```
1021 kubextl get pod -n kube-system
1022 kubectl get pod -n kube-system
1023 kubectl get logs -n kube-system cluster-autoscaler-6768dd59d5-cfm9r
1024 kubectl logs -n kube-system cluster-autoscaler-6768dd59d5-cfm9r
1025 sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubectl apply -f nginx.yaml
deployment.apps/nginx created
service/nginx created
service/nginx created
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubectl get pod
NAME
READY STATUS RESTARTS AGE
nginx-55f598f8d-pxv65 1/1 Running 0 2m50s
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
% kubectl get svc
NAME
TYPE
CLUSTER-IP EXTERNAL-IP
kubernetes ClusterIP 10.100.0.1 <none>
nginx LoadBalancer 10.100.233.211 abef715412de046df80f6e33147b95f0-1056566250.eu-central-1.elb.amazonaws.com 80:30017/TCP 3m1s
sgworker@MacBook-Pro-3.fritz.box /Users/sgworker/Desktop/DevOps_Exercises
```

© △ Nicht sicher abef715412de046df80f6e33147b95f0-1056566250.eu-central-1.elb.amazonaws.com



Thank you for using nginx.

```
nginx-55f598f8d-s8mv4
                                                         0
                          1/1
                                   Running
                                                                      7s
sgworker@MacBook-Pro-3.fritz.box
% kubectl get pods
                                   STATUS
                          READY
                                              RESTARTS
                                                          AGE
                          1/1
1/1
1/1
1/1
1/1
nginx-55f598f8d-4drdm
                                   Running
                                                           9s
nginx-55f598f8d-5nwdt
                                   Running
                                                           9s
nginx-55f598f8d-67x4h
                                                          9s
                                   Running
nginx-55f598f8d-75d9t
                                   Running
                                              0
                                                          9s
nginx-55f598f8d-86csr
                                   Running
                                                           95
nginx-55f598f8d-94bsm
                                              0
                                                          95
                                   Running
nginx-55f598f8d-b4jcz
                                                          9s
                                   Running
                                              0
nginx-55f598f8d-dd59n
                                              0
                          1/1
                                   Running
                                                          9s
nginx-55f598f8d-gllvd
                                   Running
                                              0
                                                          9s
nginx-55f598f8d-gp6xs
                                                          9s
                                   Running
                                              0
nginx-55f598f8d-hgxtd
nginx-55f598f8d-kjwn7
                                                          9s
                                   Running
                                   Running
                                                          9s
nginx-55f598f8d-kkqbp
                                                          9s
                                   Running
nginx-55f598f8d-lw8zl
                                                          9s
                                   Running
nginx-55f598f8d-mgq5t
                                                          9s
                                   Running
nginx-55f598f8d-p4h9w
                                                           9s
                                   Running
nginx-55f598f8d-pxv65
                                              0
                                                          8m46s
                                   Running
nginx-55f598f8d-rjj7x
                                   Running
                                                          95
nginx-55f598f8d-rsc5j
                                   Running
                                                          9s
nginx-55f598f8d-s8mv4
                                   Running
                                              0
                                                          9s
   worker@MacBook-Pro-3.fritz.box
```

Step4: In step 4, I started 20 NGINX instances, and one EC2 instance was sufficient. Then I deployed 40 NGINX instances, and the autoscaler reacted by launching another EC2 instance and distributing the load.

here my logfile from the autoscaler container:

```
I0508 08:48:35.898762
                            1 main.go:551] Cluster Autoscaler 1.27.8
I0508 08:48:35.912583
                            1 leaderelection.go:245] attempting to acquire
leader lease kube-system/cluster-autoscaler...
                            1 leaderelection.go:349] lock is held by
I0508 08:48:35.916707
cluster—autoscaler—6768dd59d5—cfm9r and has not yet expired
I0508 08:48:35.916724
                            1 leaderelection.go:250] failed to acquire
lease kube-system/cluster-autoscaler
10508 08:48:39.445526
                            1 leaderelection.go:349] lock is held by
cluster-autoscaler-6768dd59d5-cfm9r and has not yet expired
10508 08:48:39.445544
                            1 leaderelection.go:250] failed to acquire
lease kube-system/cluster-autoscaler
I0508 08:48:43.016496
                            1 leaderelection.go:349] lock is held by
cluster—autoscaler—6768dd59d5—cfm9r and has not yet expired
```

```
lease kube-system/cluster-autoscaler
I0508 08:48:47.177420
                    1 leaderelection.go:349] lock is held by
cluster—autoscaler—6768dd59d5—cfm9r and has not yet expired
I0508 08:48:47.177438
                       1 leaderelection.go:250] failed to acquire
lease kube-system/cluster-autoscaler
                   1 leaderelection.go:349] lock is held by
10508 08:48:50.366404
cluster-autoscaler-6768dd59d5-cfm9r and has not yet expired
10508 08:48:50.366422
                       1 leaderelection.go:250] failed to acquire
lease kube-system/cluster-autoscaler
10508 08:48:54.631427 1 leaderelection.go:255] successfully acquired
lease kube-system/cluster-autoscaler
                       1 event_sink_logging_wrapper.go:48]
10508 08:48:54.631527
Event(v1.ObjectReference{Kind:"Lease", Namespace:"kube-system",
Name: "cluster-autoscaler", UID: "0933366b-715d-4ef8-bef8-8c22620e015d",
APIVersion: "coordination.k8s.io/v1", ResourceVersion: "16068",
FieldPath:""}): type: 'Normal' reason: 'LeaderElection' cluster-
autoscaler-6768dd59d5-hfffg became leader
10508 08:48:54.633490
                       1 reflector.go:287] Starting reflector
*v1.ReplicationController (0s) from k8s.io/client-
go/informers/factory.go:150
10508 08:48:54.633507
                       1 reflector.go:323] Listing and watching
*v1.ReplicationController from k8s.io/client-go/informers/factory.go:150
*v1.ReplicaSet (0s) from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.633770
                       1 reflector.go:323] Listing and watching
*v1.ReplicaSet from k8s.io/client-go/informers/factory.go:150
I0508 08:48:54.633948 1 reflector.go:287] Starting reflector *v1.Pod
(0s) from k8s.io/client-go/informers/factory.go:150
*v1.Pod from k8s.io/client-go/informers/factory.go:150
*v1.Node (0s) from k8s.io/client-go/informers/factory.go:150
*v1.Node from k8s.io/client-go/informers/factory.go:150
*v1.CSIDriver (0s) from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.634408
                       1 reflector.go:323] Listing and watching
*v1.CSIDriver from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.635256
                     1 reflector.go:287] Starting reflector
*v1.Namespace (0s) from k8s.io/client-go/informers/factory.go:150
I0508 08:48:54.635270
                       1 reflector.go:323] Listing and watching
*v1.Namespace from k8s.io/client-go/informers/factory.go:150
                       1 reflector.go:287] Starting reflector
10508 08:48:54.636011
*v1.StatefulSet (0s) from k8s.io/client-go/informers/factory.go:150
                       1 reflector.go:323] Listing and watching
10508 08:48:54.636027
*v1.StatefulSet from k8s.io/client-go/informers/factory.go:150
I0508 08:48:54.636855
                      1 reflector.go:287] Starting reflector
*v1.StorageClass (0s) from k8s.io/client-go/informers/factory.go:150
*v1.StorageClass from k8s.io/client-go/informers/factory.go:150
I0508 08:48:54.637722
                       1 reflector.go:287] Starting reflector
*v1.CSINode (0s) from k8s.io/client-go/informers/factory.go:150
                       1 reflector.go:323] Listing and watching
10508 08:48:54.637732
```

```
*v1.CSINode from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.638386
                           1 reflector.go:287] Starting reflector
*v1.CSIStorageCapacity (0s) from k8s.io/client-go/informers/factory.go:150
*v1.CSIStorageCapacity from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.638599
                           1 reflector.go:287] Starting reflector
*v1.PodDisruptionBudget (0s) from k8s.io/client-
go/informers/factory.go:150
10508 08:48:54.638606
                           1 reflector.go:323] Listing and watching
*v1.PodDisruptionBudget from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.638825
                           1 reflector.go:287] Starting reflector
*v1.Service (0s) from k8s.io/client-go/informers/factory.go:150
I0508 08:48:54.638831
                           1 reflector.go:323] Listing and watching
*v1.Service from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.639095
                           1 reflector.go:287] Starting reflector
*v1.PersistentVolume (0s) from k8s.io/client-go/informers/factory.go:150
                           1 reflector.go:323] Listing and watching
10508 08:48:54.639101
*v1.PersistentVolume from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.639669
                           1 reflector.go:287] Starting reflector
*v1.PersistentVolumeClaim (0s) from k8s.io/client-
go/informers/factory.go:150
                           1 reflector.go:323] Listing and watching
10508 08:48:54.639679
*v1.PersistentVolumeClaim from k8s.io/client-go/informers/factory.go:150
10508 08:48:54.639732
                           1 reflector.go:287] Starting reflector *v1.Pod
(1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:188
10508 08:48:54.639737
                          1 reflector.go:323] Listing and watching
*v1.Pod from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:188
10508 08:48:54.639795
                          1 reflector.go:287] Starting reflector *v1.Pod
(1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:212
I0508 08:48:54.639799
                           1 reflector.go:323] Listing and watching
*v1.Pod from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:212
10508 08:48:54.639831
                           1 reflector.go:287] Starting reflector
*v1.Node (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:246
10508 08:48:54.639837
                           1 reflector.go:323] Listing and watching
*v1.Node from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:246
                           1 reflector.go:287] Starting reflector
10508 08:48:54.639878
*v1.Node (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:246
I0508 08:48:54.639881
                           1 reflector.go:323] Listing and watching
*v1.Node from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:246
                           1 reflector.go:287] Starting reflector
10508 08:48:54.640009
*v1.PodDisruptionBudget (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:309
I0508 08:48:54.640013
                           1 reflector.go:323] Listing and watching
*v1.PodDisruptionBudget from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:309
                          1 reflector.go:287] Starting reflector
10508 08:48:54.640220
```

```
*v1.DaemonSet (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:320
                            1 reflector.go:323] Listing and watching
10508 08:48:54.640225
*v1.DaemonSet from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:320
10508 08:48:54.640355
                            1 reflector.go:287] Starting reflector
*v1.ReplicationController (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:329
                            1 reflector.go:323] Listing and watching
I0508 08:48:54.640362
*v1.ReplicationController from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:329
10508 08:48:54.640479
                            1 reflector.go:287] Starting reflector *v1.Job
(1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:338
I0508 08:48:54.640483
                            1 reflector.go:323] Listing and watching
*v1.Job from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:338
I0508 08:48:54.640615
                            1 reflector.go:287] Starting reflector
*v1.ReplicaSet (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:347
I0508 08:48:54.640619
                            1 reflector.go:323] Listing and watching
*v1.ReplicaSet from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:347
I0508 08:48:54.640799
                            1 reflector.go:287] Starting reflector
*v1.StatefulSet (1h0m0s) from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:356
10508 08:48:54.640803
                            1 reflector.go:323] Listing and watching
*v1.StatefulSet from k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:356
10508 08:48:54.896913
                           1 request.go:628] Waited for 258.456401ms due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/storage.k8s.io/v1/csistoragecapacities?
limit=500&resourceVersion=0
I0508 08:48:55.034041
                            1 request.go:628] Waited for 395.3416ms due to
client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/policy/v1/poddisruptionbudgets?
limit=500&resourceVersion=0
I0508 08:48:55.234195
                            1 request.go:628] Waited for 595.267491ms due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/services?limit=500&resourceVersion=0
I0508 08:48:55.433399
                           1 request.go:628] Waited for 794.164815ms due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/persistentvolumes?
limit=500&resourceVersion=0
10508 08:48:55.633784
                            1 request.go:628] Waited for 994.025803ms due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/persistentvolumeclaims?
limit=500&resourceVersion=0
I0508 08:48:55.833773
                            1 request.go:628] Waited for 1.193944606s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/pods?
fieldSelector=spec.nodeName%3D%2Cstatus.phase%21%3DFailed%2Cstatus.phase%2
1%3DSucceeded&limit=500&resourceVersion=0
10508 08:48:55.833796
                            1 request.go:696] Waited for 1.193944606s due
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to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/pods?
fieldSelector=spec.nodeName%3D%2Cstatus.phase%21%3DFailed%2Cstatus.phase%2
1%3DSucceeded&limit=500&resourceVersion=0
                            1 request.go:628] Waited for 1.394034437s due
I0508 08:48:56.033896
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/pods?
fieldSelector=spec.nodeName%21%3D%2Cstatus.phase%21%3DFailed%2Cstatus.phas
e%21%3DSucceeded&limit=500&resourceVersion=0
10508 08:48:56.233824
                            1 request.go:628] Waited for 1.593932914s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/nodes?limit=500&resourceVersion=0
10508 08:48:56.433863
                            1 request.go:628] Waited for 1.793909594s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/nodes?limit=500&resourceVersion=0
10508 08:48:56.633918
                            1 request.go:628] Waited for 1.99374719s due
to client-side throttling, not priority and fairness, request:
GET: https://10.100.0.1:443/apis/policy/v1/poddisruptionbudgets?
limit=500&resourceVersion=0
10508 08:48:56.833786
                            1 request.go:628] Waited for 2.193429728s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/apps/v1/daemonsets?
limit=500&resourceVersion=0
I0508 08:48:56.833810
                            1 request.go:696] Waited for 2.193429728s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/apps/v1/daemonsets?
limit=500&resourceVersion=0
10508 08:48:57.033396
                            1 request.go:628] Waited for 2.392935802s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/api/v1/replicationcontrollers?
limit=500&resourceVersion=0
I0508 08:48:57.234215
                           1 request.go:628] Waited for 2.593629244s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/batch/v1/jobs?limit=500&resourceVersion=0
I0508 08:48:57.434139
                            1 request.go:628] Waited for 2.793372456s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/apps/v1/replicasets?
limit=500&resourceVersion=0
I0508 08:48:57.633812
                            1 request.go:628] Waited for 2.99288543s due
to client-side throttling, not priority and fairness, request:
GET:https://10.100.0.1:443/apis/apps/v1/statefulsets?
limit=500&resourceVersion=0
10508 08:48:57.834274
                            1 request.go:628] Waited for 2.939577054s due
to client-side throttling, not priority and fairness, request:
POST: https://10.100.0.1:443/api/v1/namespaces/kube-system/configmaps
10508 08:48:57.834294
                            1 request.go:696] Waited for 2.939577054s due
to client-side throttling, not priority and fairness, request:
POST: https://10.100.0.1:443/api/v1/namespaces/kube-system/configmaps
                            1 cloud_provider_builder.go:29] Building aws
I0508 08:48:57.844139
cloud provider.
I0508 08:49:01.800717
                            1 aws_cloud_provider.go:422] Using static
instance type x2gd.4xlarge
10508 08:49:01.800753
                            1 aws_cloud_provider.go:422] Using static
instance type u-24tb1.112xlarge
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I0508 08:49:01.800784	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type h1.16xlarge I0508 08:49:01.800800	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type x2iezn.2xlarge</pre>				
I0508 08:49:01.800810 instance type mac2.metal	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
10508 08:49:01.800823	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type g3s.xlarge				
<pre>I0508 08:49:01.800833 instance type x2gd.12xlarge</pre>	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.800845	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type x2gd.16xlarge</pre>				
I0508 08:49:01.800865 instance type m2.4xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.800883	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type m1.xlarge</pre>				
I0508 08:49:01.800895 instance type g3.16xlarge	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
I0508 08:49:01.800907	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type c1.xlarge</pre>				
I0508 08:49:01.800927 instance type vt1.6xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.800937	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type g2.8xlarge				
I0508 08:49:01.800953 instance type p5.48xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.800965	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type p3dn.24xlarge</pre>				
I0508 08:49:01.800978 instance type p2.xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.800990	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type h1.8xlarge				
I0508 08:49:01.801003 instance type cc2.8xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.801020	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type x2gd.large				
I0508 08:49:01.801035 instance type t1.micro	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.801050	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type m1.small</pre>				
I0508 08:49:01.801065 instance type m1.large	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.801078	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
instance type h1.4xlarge				
I0508 08:49:01.801091 instance type dl1.24xlarge	1	aws_cloud_provider.go:422]	Using	static
10508 08:49:01.801102	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type x2gd.xlarge</pre>				
I0508 08:49:01.801121 instance type x2gd.2xlarge	1	aws_cloud_provider.go:422]	Using	static
I0508 08:49:01.801134	1	<pre>aws_cloud_provider.go:422]</pre>	Using	static
<pre>instance type p4de.24xlarge</pre>				
I0508 08:49:01.801146 instance type vt1.24xlarge	1	aws_cloud_provider.go:422]	Using	static
This cance type vitiz4x large				

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I0508 08:49:01.801160
                            1 aws_cloud_provider.go:422] Using static
instance type vt1.3xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801176
instance type g2.2xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801189
instance type x2iezn.6xlarge
10508 08:49:01.801198
                            1 aws_cloud_provider.go:422] Using static
instance type x2iezn.8xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801214
instance type m2.xlarge
I0508 08:49:01.801225
                            1 aws_cloud_provider.go:422] Using static
instance type x2gd.medium
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801237
instance type g3.8xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801249
instance type c1.medium
I0508 08:49:01.801263
                            1 aws_cloud_provider.go:422] Using static
instance type p2.8xlarge
I0508 08:49:01.801278
                            1 aws_cloud_provider.go:422] Using static
instance type x2iezn.4xlarge
I0508 08:49:01.801290
                            1 aws_cloud_provider.go:422] Using static
instance type trn1.2xlarge
10508 08:49:01.801318
                            1 aws_cloud_provider.go:422] Using static
instance type m2.2xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801332
instance type trn1.32xlarge
                            1 aws_cloud_provider.go:422] Using static
10508 08:49:01.801346
instance type g3.4xlarge
                            1 aws_cloud_provider.go:422] Using static
I0508 08:49:01.801357
instance type x2gd.metal
I0508 08:49:01.801372
                            1 aws_cloud_provider.go:422] Using static
instance type h1.2xlarge
10508 08:49:01.801380
                            1 aws_cloud_provider.go:422] Using static
instance type x2gd.8xlarge
I0508 08:49:01.801391
                            1 aws_cloud_provider.go:422] Using static
instance type p2.16xlarge
I0508 08:49:01.801402
                            1 aws_cloud_provider.go:422] Using static
instance type x2iezn.12xlarge
I0508 08:49:01.801417
                            1 aws_cloud_provider.go:422] Using static
instance type x2iezn.metal
I0508 08:49:01.801428
                            1 aws_cloud_provider.go:422] Using static
instance type m1.medium
10508 08:49:01.801437
                            1 aws_cloud_provider.go:422] Using static
instance type f1.16xlarge
                            1 aws_cloud_provider.go:432] Successfully load
10508 08:49:01.801511
882 EC2 Instance Types [m8gd.large c8g.16xlarge x2gd.metal mac2.metal
x8g.metal-24xl c7a.48xlarge i3.16xlarge r6id.8xlarge r5n.metal
inf1.24xlarge m6g.4xlarge r8gd.metal-48xl dl1.24xlarge m5n.xlarge
r7g.16xlarge r7i.metal-48xl t2.micro r6g.12xlarge r7g.xlarge g5.xlarge
x8g.4xlarge r6gd.12xlarge c7i-flex.8xlarge m5.metal c5.12xlarge t3a.micro
r6i.metal m8qd.16xlarge c6qd.metal m8q.16xlarge c7a.24xlarge m5d.2xlarge
inf2.24xlarge inf1.2xlarge c8gd.8xlarge g6e.48xlarge r6in.xlarge
c6in.24xlarge m6i.large c8g.metal-48xl m7a.4xlarge c5.metal g3.4xlarge
m5d.xlarge m7i-flex.12xlarge r5a.large c4.large m5a.4xlarge m6gd.metal
```

c7g.medium c6in.metal r8gd.metal-24xl c5.24xlarge r6a.24xlarge c7g.large x8g.2xlarge t4g.medium r7gd.xlarge c6gd.16xlarge r5ad.12xlarge m5d.large m6a.metal r5n.large r5d.24xlarge m7i-flex.2xlarge c6gn.medium m6i.16xlarge r5b.4xlarge i7ie.24xlarge m6idn.2xlarge m8g.48xlarge m5n.16xlarge z1d.metal vt1.6xlarge c4.4xlarge r7a.24xlarge m7i.large i3.4xlarge c6id.xlarge c5d.large r6in.32xlarge m5d.12xlarge c5d.9xlarge m5zn.12xlarge x2iedn.16xlarge r5dn.8xlarge c6id.16xlarge m7g.16xlarge m5zn.metal c5.2xlarge m6a.xlarge r6in.12xlarge m7a.xlarge r7a.medium i8g.8xlarge m5d.24xlarge c7i.4xlarge c6gd.12xlarge t3a.small c5ad.xlarge r7i.4xlarge c7a.12xlarge is4gen.4xlarge m6id.32xlarge c8g.24xlarge r5dn.xlarge c5n.large r6gd.xlarge m7a.large r6g.16xlarge is4gen.xlarge c7a.large r5dn.16xlarge r7gd.16xlarge t3a.nano r6a.2xlarge t2.medium x8g.8xlarge x2iezn.4xlarge r7a.2xlarge c7g.16xlarge r8gd.16xlarge r7a.48xlarge g5g.4xlarge r6in.metal m6idn.4xlarge r7a.large c6in.12xlarge z1d.2xlarge i3.8xlarge is4gen.8xlarge m7i.metal-24xl r7iz.2xlarge p4d.24xlarge c5a.xlarge x2iezn.2xlarge r5.24xlarge g4ad.2xlarge c7gd.4xlarge i4i.32xlarge x1.32xlarge i2.2xlarge r5.metal m5n.8xlarge c6g.2xlarge c8qd.metal-24xl m5a.xlarge m6a.8xlarge x2iedn.8xlarge t1.micro im4gn.2xlarge r6id.12xlarge r7a.12xlarge g4dn.8xlarge d3.xlarge r5d.2xlarge r6id.metal c4.xlarge c6i.8xlarge g6e.16xlarge m6i.metal r5ad.2xlarge m6g.large m7i.metal-48xl m6id.12xlarge r6g.metal r8gd.xlarge r8qd.8xlarge q6.12xlarge qr6.8xlarge r6idn.2xlarge z1d.xlarge u-12tb1.112xlarge m6idn.metal r6id.16xlarge c6gd.8xlarge f1.4xlarge m5dn.2xlarge c6gn.12xlarge t3.small m5ad.8xlarge m5.16xlarge i3.2xlarge r6id.xlarge c5d.12xlarge r4.16xlarge p3.8xlarge c5n.metal m5.large r5a.2xlarge r7gd.large m7gd.12xlarge m5n.metal m3.xlarge c8g.8xlarge m2.2xlarge x2iedn.xlarge r5a.12xlarge x2gd.2xlarge m4.xlarge c6id.metal c6i.12xlarge r7iz.metal-16xl i4i.8xlarge r6gd.medium c7i.24xlarge c7gd.xlarge g3.8xlarge m5ad.2xlarge m7a.medium t3.micro m6a.24xlarge x2gd.medium m8g.24xlarge c6in.large g5g.8xlarge r6a.16xlarge c8gd.48xlarge i7ie.18xlarge r7iz.12xlarge u-6tb1.56xlarge m5ad.16xlarge c6i.xlarge m6id.large m6id.24xlarge c7i.8xlarge r7i.16xlarge m8gd.48xlarge c8qd.16xlarge inf1.6xlarge c5.4xlarge r5b.12xlarge r6g.large m5d.16xlarge r6in.16xlarge c6a.16xlarge r5.4xlarge r5d.8xlarge i3en.2xlarge r6id.4xlarge r6id.large r7i.large r6i.32xlarge i4i.4xlarge m6gd.8xlarge x2iezn.metal r7g.large m3.medium g3s.xlarge c8gd.24xlarge c5d.18xlarge c7g.2xlarge r5a.8xlarge c8g.2xlarge r7g.medium m7a.16xlarge c6i.16xlarge g5.16xlarge c8g.xlarge i3en.3xlarge r6a.large c5n.xlarge c6gd.2xlarge r8g.large r5.16xlarge i3en.large r7iz.metal-32xl c5d.metal x2iedn.24xlarge c3.2xlarge i3en.xlarge m7a.metal-48xl x2iezn.12xlarge m7i-flex.4xlarge c6in.xlarge r5ad.24xlarge c6g.16xlarge c5ad.8xlarge c6a.metal c7gd.metal m8qd.metal-24xl g4ad.4xlarge x1e.4xlarge m6in.large c7q.4xlarge c6i.24xlarge p3.2xlarge m8g.2xlarge i8g.16xlarge t2.2xlarge d2.xlarge g5g.metal r5ad.4xlarge c5ad.24xlarge d3.8xlarge i7ie.3xlarge c5a.4xlarge m6a.12xlarge i7ie.6xlarge r7iz.large c7a.4xlarge c5ad.2xlarge c7g.metal m6i.2xlarge r6a.4xlarge i4i.xlarge c6a.32xlarge x8g.metal-48xl r5d.12xlarge g4dn.4xlarge g6.24xlarge r6gd.metal i2.8xlarge m5a.12xlarge m6id.2xlarge c5n.9xlarge c6in.4xlarge m5d.4xlarge m5ad.12xlarge m6i.8xlarge c5n.4xlarge im4gn.large i7ie.large m7i.4xlarge i3en.metal m8g.metal-24xl m7i.24xlarge c7g.xlarge c7gd.16xlarge m6id.metal m7a.24xlarge m6in.2xlarge m7i.8xlarge x2idn.24xlarge r5n.4xlarge g5g.xlarge g4dn.2xlarge c6a.large m7gd.16xlarge r7g.2xlarge m6idn.16xlarge r8gd.2xlarge r3.2xlarge i8g.xlarge t4g.micro m6idn.8xlarge r5d.xlarge x1e.16xlarge r5a.24xlarge c6i.large c6gn.xlarge r6id.24xlarge r7a.xlarge

c4.8xlarge c8gd.medium r6idn.large r5dn.4xlarge g2.8xlarge r4.xlarge c6a.4xlarge m5ad.xlarge r8g.16xlarge r5n.2xlarge r8g.metal-48xl r5n.24xlarge r7gd.4xlarge c7gd.medium x8g.large m5zn.6xlarge a1.medium m8g.medium r6a.32xlarge inf2.48xlarge r6gd.large is4gen.large m8g.4xlarge r7q.4xlarge q6.2xlarge r6idn.12xlarge m6qd.12xlarge r3.8xlarge r7q.metal g6.xlarge im4gn.8xlarge d3en.6xlarge c8gd.xlarge d3.2xlarge inf2.xlarge r6g.8xlarge d2.4xlarge r5n.8xlarge m5ad.24xlarge r7gd.2xlarge g6e.8xlarge c6a.48xlarge r7a.8xlarge i4i.2xlarge mac2-m2.metal x8g.48xlarge c7iflex.xlarge r7i.metal-24xl m5dn.4xlarge r7iz.16xlarge i7ie.metal-48xl r5b.large m7i-flex.xlarge r7i.24xlarge m7g.large c7gd.large i7ie.12xlarge r6gd.2xlarge r6i.large c3.xlarge trn1.32xlarge r7i.2xlarge r6idn.4xlarge m5.4xlarge m6g.2xlarge r6i.24xlarge r6idn.32xlarge is4gen.medium r7i.xlarge r7gd.12xlarge r8gd.48xlarge m5n.4xlarge r4.4xlarge d2.2xlarge m6gd.16xlarge r4.large p2.16xlarge r6in.large a1.xlarge m7g.xlarge m7a.8xlarge r6q.4xlarge r7a.metal-48xl d3en.xlarge c6q.12xlarge r7i.12xlarge c6g.large i8g.24xlarge m7a.32xlarge mac1.metal u-6tb1.112xlarge c8gd.metal-48xl g6e.24xlarge m6gd.xlarge c5d.xlarge r7g.12xlarge vt1.3xlarge d3en.2xlarge m7gd.metal i8g.large g6.16xlarge m6a.large c6id.large r8q.24xlarge inf2.8xlarge r7qd.metal gr6.4xlarge c1.medium i3en.12xlarge r6g.medium r5dn.24xlarge m6in.32xlarge m4.large m7i-flex.16xlarge m4.10xlarge m8g.8xlarge c5d.4xlarge m8gd.medium d2.8xlarge u-3tb1.56xlarge c5a.16xlarge m2.4xlarge c7gd.8xlarge x2iedn.2xlarge m6a.16xlarge r5d.16xlarge r5.xlarge u-18tb1.112xlarge r6idn.24xlarge m7g.medium u-24tb1.112xlarge m6g.12xlarge c7a.medium m6g.metal i8g.2xlarge r8gd.24xlarge c5ad.4xlarge r6i.4xlarge m7g.8xlarge m8gd.12xlarge r6idn.8xlarge d3en.4xlarge x2idn.16xlarge m8g.metal-48xl m8g.xlarge g6.4xlarge m6idn.32xlarge t4g.large x2iedn.32xlarge c3.large c6id.24xlarge q6.8xlarge c7i.large c7i.xlarge r5b.8xlarge m7i-flex.large m1.medium c6id.8xlarge r6idn.16xlarge m7gd.xlarge x8g.12xlarge r5d.4xlarge r7gd.medium r6in.24xlarge m5n.12xlarge r5dn.metal i4i.large c6gn.8xlarge m6a.2xlarge r6idn.xlarge q6.48xlarge c5ad.16xlarge c7q.12xlarge c6in.32xlarge c5a.large h1.8xlarge m7a.12xlarge g3.16xlarge r5a.16xlarge c6in.2xlarge t2.small h1.4xlarge r5a.4xlarge m7i.xlarge i3.xlarge t2.nano c6g.metal m8gd.24xlarge m7g.2xlarge m5n.24xlarge m7g.4xlarge c8g.48xlarge r5dn.large r8g.48xlarge m6in.xlarge m4.16xlarge r8g.4xlarge m5ad.large i4i.metal g4dn.metal m6gd.large c5ad.12xlarge r6in.4xlarge m5.2xlarge i3.metal g5.4xlarge c6i.32xlarge m6in.16xlarge m8gd.2xlarge x1.16xlarge m6id.4xlarge r7a.4xlarge r5.large x8g.24xlarge m6idn.24xlarge t3a.large c6g.xlarge im4gn.16xlarge t2.xlarge c6g.medium c6g.8xlarge x2gd.xlarge m5.8xlarge m5zn.2xlarge r6id.32xlarge z1d.12xlarge t4g.2xlarge g4ad.xlarge d3en.12xlarge cc2.8xlarge t3.2xlarge g4dn.12xlarge m6i.4xlarge m6g.16xlarge x1e.2xlarge g5g.2xlarge r6i.16xlarge i7ie.metal-24xl c6gd.4xlarge c5a.24xlarge m6id.16xlarge m3.2xlarge p3.16xlarge p2.8xlarge t3a.2xlarge m5a.8xlarge m6i.32xlarge c8g.4xlarge i8g.4xlarge r3.4xlarge m6i.24xlarge m6in.24xlarge c5a.2xlarge r6g.2xlarge c7a.32xlarge c6id.4xlarge inf1.xlarge m7gd.8xlarge r5b.2xlarge r5ad.large x1e.8xlarge x2idn.metal r6i.12xlarge c8gd.large m6in.metal im4gn.4xlarge r8g.8xlarge r5a.xlarge g5.12xlarge m6in.4xlarge r6idn.metal t4g.nano m8gd.8xlarge r8gd.large c5.large c5.9xlarge dl2q.24xlarge i3en.6xlarge m1.small m6idn.12xlarge r7iz.32xlarge x2iedn.metal t2.large r5.12xlarge r6i.2xlarge m5a.24xlarge z1d.3xlarge m6g.8xlarge x2idn.32xlarge c3.4xlarge x1e.xlarge c7g.8xlarge m5zn.3xlarge c6in.8xlarge c8g.12xlarge c7i.48xlarge c6gd.large p5.48xlarge r5n.12xlarge c6id.12xlarge m7i.12xlarge r7a.32xlarge u-9tb1.112xlarge f1.2xlarge c7i-flex.2xlarge r6gd.8xlarge h1.2xlarge

```
r8g.medium m7gd.2xlarge r5b.16xlarge m8gd.xlarge r8gd.12xlarge
r7i.48xlarge c6a.12xlarge m5dn.metal r8g.xlarge vt1.24xlarge r6a.xlarge
m5dn.12xlarge c5d.24xlarge g6e.12xlarge r5n.16xlarge m6id.8xlarge
r8g.2xlarge x8g.xlarge m6gd.4xlarge m5d.metal c8g.large i4i.16xlarge
c6i.2xlarge r7g.8xlarge i4i.24xlarge c4.2xlarge c1.xlarge m5.12xlarge
i7ie.xlarge t4g.xlarge c7i-flex.16xlarge r5b.metal x2iezn.8xlarge
trn1.2xlarge m7gd.4xlarge m6gd.2xlarge i7ie.2xlarge x2gd.16xlarge
c7a.metal-48xl c5.xlarge r7a.16xlarge g2.2xlarge r8g.metal-24xl
m6idn.large r5n.xlarge p4de.24xlarge c5n.2xlarge is4gen.2xlarge t4g.small
m1.large c7i-flex.4xlarge x8g.16xlarge i8g.metal-24xl c8g.medium
r6g.xlarge g5.24xlarge c6id.2xlarge m6in.8xlarge z1d.6xlarge c7a.2xlarge
r5b.24xlarge c5a.12xlarge x8g.medium m5n.large m2.xlarge t3.nano
r7iz.xlarge c7i-flex.large c7i.metal-48xl m5a.2xlarge c7i.2xlarge
r6a.12xlarge r8gd.medium g4dn.16xlarge m6a.32xlarge x2gd.4xlarge
c7qd.2xlarge c7a.16xlarge c6i.4xlarge r5dn.2xlarge q6e.4xlarge c7a.xlarge
m5a.16xlarge m8gd.4xlarge d3.4xlarge g5.8xlarge r6id.2xlarge m7g.12xlarge
r4.2xlarge m5dn.16xlarge r8g.12xlarge r5.2xlarge m3.large m6g.xlarge
m1.xlarge p3dn.24xlarge c7a.8xlarge m7i.48xlarge a1.metal x2gd.8xlarge
m7qd.large c3.8xlarge m6qd.medium t3.large r5dn.12xlarge r5d.metal
r7iz.8xlarge r3.large q4dn.xlarge m5a.large z1d.large r3.xlarge
g4ad.8xlarge c5a.8xlarge g5.2xlarge r5.8xlarge i3.large t3a.xlarge
i2.4xlarge m6id.xlarge i2.xlarge c6qd.medium m5dn.24xlarge c7i.metal-24xl
t3a.medium c7i.16xlarge c5d.2xlarge r5ad.8xlarge m8g.12xlarge a1.4xlarge
c6g.4xlarge c6gn.large r7iz.4xlarge m5n.2xlarge g6e.2xlarge m7g.metal
m5d.8xlarge m5.24xlarge m5zn.large c6in.16xlarge m5dn.xlarge g5g.16xlarge
m6i.xlarge c5ad.large m5.xlarge m7gd.medium m6idn.xlarge c8gd.12xlarge
c8gd.2xlarge r6gd.16xlarge g4ad.16xlarge i3en.24xlarge c8g.metal-24xl
c6a.2xlarge c7qd.12xlarge m4.4xlarge c6a.xlarge t3.xlarge r6qd.4xlarge
m7a.48xlarge c6gn.16xlarge m7i.2xlarge c8gd.4xlarge r5ad.16xlarge m7i-
flex.8xlarge c6gn.2xlarge i4i.12xlarge m8gd.metal-48xl a1.large
r6a.8xlarge c5.18xlarge c6a.24xlarge m5ad.4xlarge c6a.8xlarge m6g.medium
c6gd.xlarge m5dn.large x1e.32xlarge m8g.large f1.16xlarge im4gn.xlarge
c7i-flex.12xlarge r6in.8xlarge m5dn.8xlarge c6id.32xlarge x2iedn.4xlarge
m4.2xlarge r6i.8xlarge c5n.18xlarge m5zn.xlarge x2iezn.6xlarge
c6qn.4xlarge t3.medium g6e.xlarge x2gd.large r6a.metal r5d.large
g5.48xlarge h1.16xlarge r6a.48xlarge r4.8xlarge d3en.8xlarge r7gd.8xlarge
r7i.8xlarge r6i.xlarge a1.2xlarge m6i.12xlarge x2gd.12xlarge i7ie.48xlarge
m6a.4xlarge p2.xlarge m7i.16xlarge r5b.xlarge c6i.metal i8g.12xlarge
c7i.12xlarge r6in.2xlarge m6a.48xlarge m6in.12xlarge r8gd.4xlarge
r5ad.xlarge m7a.2xlarge]
I0508 08:49:01.801698
                            1 aws_manager.go:79] AWS SDK Version: 1.48.7
I0508 08:49:01.801789
                            1 auto_scaling_groups.go:369] Regenerating
instance to ASG map for ASG names: []
I0508 08:49:01.801802
                            1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:49:01.987280
                            1 auto_scaling_groups.go:163] Registering ASG
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
                            1 aws_wrapper.go:703] 0 launch configurations
10508 08:49:01.987309
to query
I0508 08:49:01.987315
                            1 aws_wrapper.go:704] 0 launch templates to
query
                            1 aws_wrapper.go:724] Successfully queried 0
10508 08:49:01.987322
launch configurations
```

```
I0508 08:49:01.987328
                           1 aws_wrapper.go:735] Successfully queried 0
launch templates
I0508 08:49:01.987335
                           1 aws_wrapper.go:746] Successfully queried
instance requirements for 0 ASGs
I0508 08:49:01.987349
                           1 auto scaling groups.go:427] Extracted
autoscaling options from "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788" ASG tags: map[]
I0508 08:49:01.987364
                           1 aws manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:50:01.987359968 +0000 UTC m=+86.779430983
I0508 08:49:01.987625
                           1 main.go:402] Registered cleanup signal
handler
I0508 08:49:01.987676
                           1 node_instances_cache.go:156] Start
refreshing cloud provider node instances cache
I0508 08:49:01.987695
                           1 node_instances_cache.go:168] Refresh cloud
provider node instances cache finished, refresh took 7.044µs
I0508 08:49:11.987794
                           1 static_autoscaler.go:289] Starting main loop
                           1 aws_manager.go:188] Found multiple
I0508 08:49:11.988253
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
E0508 08:49:12.070870
                       1 managed_nodegroup_cache.go:136] Failed to
query the managed nodegroup ng-cc1c9586 for the cluster my-cluster while
looking for labels/taints/tags: AccessDeniedException: User:
arn:aws:sts::524196012679:assumed-
role/EKSAutoScalerRole/1746694137844533326 is not authorized to perform:
eks:DescribeNodegroup on resource: arn:aws:eks:eu-central-
1:524196012679:nodegroup/my-cluster/ng-cc1c9586/e0cb5767-5310-8285-c96d-
77388791a788
                           1 aws_manager.go:299] Failed to get labels
E0508 08:49:12.070897
from EKS DescribeNodegroup API for nodegroup ng-cc1c9586 in cluster my-
cluster because AccessDeniedException: User:
arn:aws:sts::524196012679:assumed-
role/EKSAutoScalerRole/1746694137844533326 is not authorized to perform:
eks:DescribeNodegroup on resource: arn:aws:eks:eu-central-
1:524196012679:nodegroup/my-cluster/ng-cc1c9586/e0cb5767-5310-8285-c96d-
77388791a788.
W0508 08:49:12.071075
                           1 clusterstate.go:444] AcceptableRanges have
not been populated yet. Skip checking
schedulables
I0508 08:49:12.071247
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:49:12.071287
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:49:12.071295
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:49:12.071300
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:49:12.071327
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:49:12.071350
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:49:12.071374
                           1 pre_filtering_processor.go:67] Skipping ip-
192-168-17-5.eu-central-1.compute.internal - node group min size reached
```

```
(current: 1, min: 1)
I0508 08:49:12.071390
                            1 pre filtering processor.go:67] Skipping ip-
192-168-47-237.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:12.071402
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:12.071514
                           1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:49:12.071552
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:49:12.071580
                            1 legacy.go:296] No candidates for scale down
                            1 static_autoscaler.go:289] Starting main loop
10508 08:49:22.085579
10508 08:49:22.086029
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                            1 filter out schedulable.go:63] Filtering out
10508 08:49:22.086274
schedulables
10508 08:49:22.086291
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:49:22.086302
                            1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:49:22.086308
                            1 filter out daemon sets.go:40] Filtering out
daemon set pods
10508 08:49:22.086312
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:49:22.086338
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:49:22.086363
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:49:22.086381
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-17-5.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:22.086391
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-47-237.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
10508 08:49:22.086400
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:22.086442
                            1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:49:22.086481
                            1 static_autoscaler.go:649] Starting scale
down
                            1 legacy.go:296] No candidates for scale down
10508 08:49:22.086506
I0508 08:49:32.101506
                            1 static_autoscaler.go:289] Starting main loop
```

```
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:49:32.102157
                           1 filter out schedulable.go:63] Filtering out
schedulables
I0508 08:49:32.102173
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:49:32.102185
                           1 filter out schedulable.go:83] No schedulable
pods
I0508 08:49:32.102191
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:49:32.102197
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:49:32.102225
                           1 static autoscaler.go:554] No unschedulable
pods
I0508 08:49:32.102246
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:49:32.102265
                           1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
                           1 pre_filtering_processor.go:67] Skipping ip-
I0508 08:49:32.102279
192-168-17-5.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:32.102289
                           1 pre_filtering_processor.go:67] Skipping ip-
192-168-47-237.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:32.102324
                           1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:49:32.102361
                           1 static_autoscaler.go:649] Starting scale
I0508 08:49:32.102387
                           1 legacy.go:296] No candidates for scale down
I0508 08:49:42.114047
                           1 static_autoscaler.go:289] Starting main loop
I0508 08:49:42.114515
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:49:42.114747
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:49:42.114765
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:49:42.114776
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:49:42.114784
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
10508 08:49:42.114790
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:49:42.114815
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:49:42.114840
                           1 static_autoscaler.go:577] Calculating
```

```
unneeded nodes
I0508 08:49:42.114859
                            1 pre filtering processor.go:67] Skipping ip-
192-168-17-5.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:42.114870
                            1 pre filtering processor.go:67] Skipping ip-
192-168-47-237.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:42.114886
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:42.114929
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:49:42.114972
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:49:42.115011
                            1 legacy.go:296] No candidates for scale down
10508 08:49:52.127359
                            1 static autoscaler.go:289] Starting main loop
I0508 08:49:52.127738
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:49:52.127942
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:49:52.127957
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:49:52.127968
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:49:52.127974
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
                            1 filter_out_daemon_sets.go:49] Filtered out 0
I0508 08:49:52.127979
daemon set pods, 0 unschedulable pods left
I0508 08:49:52.128003
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:49:52.128026
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:49:52.128038
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-17-5.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:52.128045
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-47-237.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:52.128054
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:49:52.128081
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:49:52.128105
                            1 static_autoscaler.go:649] Starting scale
```

```
down
I0508 08:49:52.128121
                            1 legacy.go:296] No candidates for scale down
I0508 08:50:02.141781
                            1 static_autoscaler.go:289] Starting main loop
                            1 auto_scaling_groups.go:369] Regenerating
I0508 08:50:02.141857
instance to ASG map for ASG names: []
I0508 08:50:02.141871
                            1 auto scaling groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:50:02.316135
                            1 aws_wrapper.go:703] 0 launch configurations
to query
I0508 08:50:02.316154
                            1 aws_wrapper.go:704] 0 launch templates to
query
                            1 aws_wrapper.go:724] Successfully queried 0
I0508 08:50:02.316162
launch configurations
I0508 08:50:02.316170
                            1 aws wrapper.go:735] Successfully gueried 0
launch templates
I0508 08:50:02.316178
                            1 aws_wrapper.go:746] Successfully queried
instance requirements for 0 ASGs
I0508 08:50:02.316189
                            1 aws manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:51:02.316185683 +0000 UTC m=+147.108256704
I0508 08:50:02.316582
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:50:02.316782
                            1 clusterstate.go:1016] Failed to check cloud
provider has instance for ip-192-168-47-237.eu-central-1.compute.internal:
node is not present in aws: could not find instance {aws:///eu-central-
1c/i-0acbc17d8156cf259 i-0acbc17d8156cf259}
10508 08:50:02.316856
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:50:02.316866
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:50:02.316876
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:50:02.316882
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:50:02.316887
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:50:02.316911
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:50:02.316930
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:50:02.316943
                            1 pre_filtering_processor.go:57] Node ip-192-
168-47-237.eu-central-1.compute.internal should not be processed by
cluster autoscaler (no node group config)
                            1 pre_filtering_processor.go:67] Skipping ip-
I0508 08:50:02.316953
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:02.316964
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-17-5.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:02.316998
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
```

```
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:50:02.317029
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:02.317049
                            1 legacy.go:296] No candidates for scale down
I0508 08:50:12.337147
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:50:12.337599
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:50:12.337779
                            1 clusterstate.go:1016] Failed to check cloud
provider has instance for ip-192-168-47-237.eu-central-1.compute.internal:
node is not present in aws: could not find instance {aws:///eu-central-
1c/i-0acbc17d8156cf259 i-0acbc17d8156cf259}
I0508 08:50:12.337837
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
I0508 08:50:12.337862
                            1 filter out schedulable.go:63] Filtering out
schedulables
I0508 08:50:12.337871
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:50:12.337882
                            1 filter out schedulable.go:83] No schedulable
pods
I0508 08:50:12.337888
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:50:12.337894
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:50:12.337919
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:50:12.337940
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:50:12.337956
                            1 pre_filtering_processor.go:57] Node ip-192-
168-47-237.eu-central-1.compute.internal should not be processed by
cluster autoscaler (no node group config)
I0508 08:50:12.337973
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:12.338014
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:50:12.338049
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:12.338070
                            1 legacy.go:296] No candidates for scale down
I0508 08:50:22.352557
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:50:22.352886
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:50:22.353065
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1c/i-0acbc17d8156cf259
I0508 08:50:22.353103
                            1 static_autoscaler.go:407] 2 unregistered
```

```
nodes present
W0508 08:50:22.353123
                            1 static autoscaler.go:741] No node group for
node aws:///eu-central-1c/i-0acbc17d8156cf259, skipping
I0508 08:50:22.353144
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:50:22.353151
                            1 filter out schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:50:22.353158
                            1 filter out schedulable.go:83] No schedulable
pods
I0508 08:50:22.353163
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
10508 08:50:22.353168
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:50:22.353186
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:50:22.353198
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:50:22.353209
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:22.353232
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=false
10508 08:50:22.353258
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:22.353274
                            1 legacy.go:296] No candidates for scale down
10508 08:50:32.367389
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:50:32.367701
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:50:32.367888
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1c/i-0acbc17d8156cf259
10508 08:50:32.367924
                            1 static_autoscaler.go:407] 2 unregistered
nodes present
W0508 08:50:32.367946
                            1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1c/i-0acbc17d8156cf259, skipping
I0508 08:50:32.367970
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
10508 08:50:32.367982
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:50:32.367996
                            1 filter_out_schedulable.go:83] No schedulable
I0508 08:50:32.368002
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
10508 08:50:32.368008
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:50:32.368034
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:50:32.368053
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
```

```
10508 08:50:32.368070
                           1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:32.368105
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:50:32.368138
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:32.368159
                            1 legacy.go:296] No candidates for scale down
10508 08:50:42.384770
                            1 static_autoscaler.go:289] Starting main loop
                            1 aws_manager.go:188] Found multiple
I0508 08:50:42.385187
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:50:42.385408
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1c/i-0acbc17d8156cf259
10508 08:50:42.385448
                            1 static_autoscaler.go:407] 2 unregistered
nodes present
W0508 08:50:42.385467
                           1 static autoscaler.go:741] No node group for
node aws:///eu-central-1c/i-0acbc17d8156cf259, skipping
10508 08:50:42.385494
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
10508 08:50:42.385511
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:50:42.385527
                            1 filter out schedulable.go:83] No schedulable
pods
10508 08:50:42.385536
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:50:42.385542
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:50:42.385567
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:50:42.385589
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:50:42.385606
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
10508 08:50:42.385644
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:50:42.385680
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:42.385708
                            1 legacy.go:296] No candidates for scale down
I0508 08:50:52.398431
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:50:52.398786
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
```

```
W0508 08:50:52.398952
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1c/i-0acbc17d8156cf259
                            1 static_autoscaler.go:407] 2 unregistered
10508 08:50:52.399005
nodes present
W0508 08:50:52.399025
                            1 static autoscaler.go:741] No node group for
node aws:///eu-central-1c/i-0acbc17d8156cf259, skipping
10508 08:50:52.399049
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:50:52.399062
                            1 filter out schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:50:52.399073
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
10508 08:50:52.399080
daemon set pods
10508 08:50:52.399087
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:50:52.399110
                            1 static_autoscaler.go:554] No unschedulable
pods
                            1 static_autoscaler.go:577] Calculating
I0508 08:50:52.399130
unneeded nodes
I0508 08:50:52.399149
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:50:52.399181
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:50:52.399214
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:50:52.399239
                            1 legacy.go:296] No candidates for scale down
                            1 node_instances_cache.go:156] Start
I0508 08:51:01.987929
refreshing cloud provider node instances cache
I0508 08:51:01.987960
                            1 node_instances_cache.go:168] Refresh cloud
provider node instances cache finished, refresh took 10.942µs
I0508 08:51:02.410492
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:51:02.410547
                            1 auto_scaling_groups.go:369] Regenerating
instance to ASG map for ASG names: []
I0508 08:51:02.410563
                            1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:51:02.533422
                            1 aws_wrapper.go:703] 0 launch configurations
to query
I0508 08:51:02.533439
                            1 aws_wrapper.go:704] 0 launch templates to
query
I0508 08:51:02.533445
                            1 aws_wrapper.go:724] Successfully queried 0
launch configurations
I0508 08:51:02.533451
                            1 aws_wrapper.go:735] Successfully queried 0
launch templates
I0508 08:51:02.533516
                            1 aws_wrapper.go:746] Successfully queried
instance requirements for 0 ASGs
I0508 08:51:02.533530
                            1 aws_manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:52:02.533527225 +0000 UTC m=+207.325598244
```

```
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:51:02.534117
                           1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:51:02.534148
                           1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:02.534159
                           1 static autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:02.534182
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:51:02.534191
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:51:02.534201
                           1 filter out schedulable.go:83] No schedulable
pods
I0508 08:51:02.534206
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:51:02.534210
                           1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:51:02.534231
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:02.534249
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:02.534262
                           1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:51:02.534297
                           1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:02.534327
                           1 static_autoscaler.go:649] Starting scale
                           1 legacy.go:296] No candidates for scale down
10508 08:51:02.534347
I0508 08:51:12.546366
                           1 static_autoscaler.go:289] Starting main loop
I0508 08:51:12.546716
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:51:12.546922
                           1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:51:12.546960
                           1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:12.546987
                           1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:12.547012
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
                           1 filter_out_schedulable.go:120] 0 pods marked
I0508 08:51:12.547020
as unschedulable can be scheduled.
I0508 08:51:12.547027
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:51:12.547031
                           1 filter_out_daemon_sets.go:40] Filtering out
```

```
daemon set pods
I0508 08:51:12.547034
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:51:12.547049
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:12.547061
                            1 static autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:12.547070
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:51:12.547099
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:12.547124
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:51:12.547139
                            1 legacy.go:296] No candidates for scale down
I0508 08:51:22.561408
                            1 static autoscaler.go:289] Starting main loop
I0508 08:51:22.561766
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:51:22.561965
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:51:22.562006
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:22.562023
                            1 static autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:22.562046
                            1 filter out schedulable.go:63] Filtering out
schedulables
I0508 08:51:22.562055
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:51:22.562065
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:51:22.562069
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:51:22.562072
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:51:22.562086
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:22.562103
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:22.562116
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:51:22.562139
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:22.562164
                            1 static_autoscaler.go:649] Starting scale
```

```
down
                            1 legacy.go:296] No candidates for scale down
I0508 08:51:22.562183
I0508 08:51:32.575034
                            1 static_autoscaler.go:289] Starting main loop
                            1 aws_manager.go:188] Found multiple
I0508 08:51:32.575357
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                            1 clusterstate.go:604] Nodegroup is nil for
W0508 08:51:32.575515
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:51:32.575554
                           1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:32.575570
                            1 static autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:32.575592
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:51:32.575605
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:51:32.575619
                            1 filter out schedulable.go:83] No schedulable
pods
I0508 08:51:32.575624
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
                            1 filter out daemon sets.go:49] Filtered out 0
I0508 08:51:32.575630
daemon set pods, 0 unschedulable pods left
I0508 08:51:32.575651
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:32.575671
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:32.575687
                            1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:51:32.575724
                            1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:32.575756
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:51:32.575781
                            1 legacy.go:296] No candidates for scale down
                            1 static_autoscaler.go:289] Starting main loop
10508 08:51:42.590015
I0508 08:51:42.590454
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:51:42.590639
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:51:42.590676
                      1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:42.590691
                            1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:42.590716
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:51:42.590731
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
```

```
I0508 08:51:42.590746
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
I0508 08:51:42.590755
daemon set pods
I0508 08:51:42.590761
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:51:42.590791
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:42.590812
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:42.590829
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
                            1 static_autoscaler.go:624] Scale down status:
10508 08:51:42.590865
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:42.590899
                            1 static_autoscaler.go:649] Starting scale
down
                            1 legacy.go:296] No candidates for scale down
I0508 08:51:42.590922
I0508 08:51:52.603762
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:51:52.604125
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:51:52.604313
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
10508 08:51:52.604354
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:51:52.604370
                            1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:51:52.604393
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:51:52.604403
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:51:52.604412
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:51:52.604416
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:51:52.604419
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:51:52.604434
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:51:52.604447
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:51:52.604460
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:51:52.604487
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
```

```
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:51:52.604510
                            1 static_autoscaler.go:649] Starting scale
down
I0508 08:51:52.604527
                            1 legacy.go:296] No candidates for scale down
I0508 08:52:02.621172
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:52:02.621356
                            1 auto_scaling_groups.go:369] Regenerating
instance to ASG map for ASG names: []
I0508 08:52:02.621390
                            1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:52:02.732452
                            1 aws_wrapper.go:703] 0 launch configurations
to query
10508 08:52:02.732467
                            1 aws_wrapper.go:704] 0 launch templates to
query
I0508 08:52:02.732474
                            1 aws_wrapper.go:724] Successfully queried 0
launch configurations
I0508 08:52:02.732481
                            1 aws_wrapper.go:735] Successfully queried 0
launch templates
I0508 08:52:02.732488
                            1 aws_wrapper.go:746] Successfully queried
instance requirements for 0 ASGs
                            1 aws manager.go:132] Refreshed ASG list, next
I0508 08:52:02.732498
refresh after 2025-05-08 08:53:02.732495573 +0000 UTC m=+267.524566591
I0508 08:52:02.732827
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:02.732995
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
10508 08:52:02.733034
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:52:02.733049
                            1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:52:02.733074
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:52:02.733085
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:52:02.733098
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
10508 08:52:02.733104
daemon set pods
I0508 08:52:02.733110
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:52:02.733136
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:52:02.733159
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:52:02.733179
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:52:02.733215
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
```

```
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:52:02.733250
                           1 static_autoscaler.go:649] Starting scale
down
I0508 08:52:02.733275
                           1 legacy.go:296] No candidates for scale down
I0508 08:52:12.750393
                           1 static autoscaler.go:289] Starting main loop
I0508 08:52:12.750721
                           1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:12.750876
                           1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
                           1 static_autoscaler.go:407] 1 unregistered
I0508 08:52:12.750914
nodes present
W0508 08:52:12.750932
                           1 static autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
schedulables
I0508 08:52:12.750967
                           1 filter out schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:52:12.750995
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:52:12.751002
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:52:12.751007
                           1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:52:12.751028
                           1 static_autoscaler.go:554] No unschedulable
sbog
I0508 08:52:12.751049
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:52:12.751065
                           1 pre filtering processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:52:12.751098
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:52:12.751130
                           1 static_autoscaler.go:649] Starting scale
down
I0508 08:52:12.751154
                           1 legacy.go:296] No candidates for scale down
                           1 static_autoscaler.go:289] Starting main loop
10508 08:52:22.766029
10508 08:52:22.766409
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:22.766596
                           1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
10508 08:52:22.766642
                           1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:52:22.766659
                           1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
10508 08:52:22.766680
                           1 filter_out_schedulable.go:63] Filtering out
```

```
schedulables
10508 08:52:22.766687
                            1 filter out schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
                            1 filter_out_schedulable.go:83] No schedulable
10508 08:52:22.766698
pods
10508 08:52:22.766703
                            1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:52:22.766709
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:52:22.766733
                            1 static_autoscaler.go:554] No unschedulable
pods
10508 08:52:22.766745
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:52:22.766755
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
10508 08:52:22.766779
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
10508 08:52:22.766809
                            1 static_autoscaler.go:649] Starting scale
10508 08:52:22.766823
                            1 legacy.go:296] No candidates for scale down
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:52:32.781290
I0508 08:52:32.781658
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:32.781851
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:52:32.781892
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:52:32.781909
                            1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
I0508 08:52:32.781931
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:52:32.781939
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:52:32.781946
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
I0508 08:52:32.781950
daemon set pods
I0508 08:52:32.781953
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:52:32.781968
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:52:32.781982
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:52:32.781996
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
I0508 08:52:32.782019
                            1 static_autoscaler.go:624] Scale down status:
```

```
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
10508 08:52:32.782044
                            1 static autoscaler.go:649] Starting scale
down
10508 08:52:32.782058
                            1 legacy.go:296] No candidates for scale down
I0508 08:52:42.796125
                            1 static autoscaler.go:289] Starting main loop
                            1 aws_manager.go:188] Found multiple
10508 08:52:42.796461
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:42.796621
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:52:42.796659
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
W0508 08:52:42.796677
                            1 static autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
10508 08:52:42.796699
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:52:42.796711
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:52:42.796724
                            1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:52:42.796730
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
10508 08:52:42.796735
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:52:42.796756
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:52:42.796776
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:52:42.796792
                            1 pre_filtering_processor.go:67] Skipping ip-
192-168-72-73.eu-central-1.compute.internal - node group min size reached
(current: 1, min: 1)
10508 08:52:42.796826
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 07:49:01.987447748 +0000 UTC m=-3573.220481230
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=false
I0508 08:52:42.796858
                            1 static_autoscaler.go:649] Starting scale
down
10508 08:52:42.796884
                            1 legacy.go:296] No candidates for scale down
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:52:52.810464
I0508 08:52:52.810816
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
W0508 08:52:52.811005
                            1 clusterstate.go:604] Nodegroup is nil for
aws:///eu-central-1a/i-0a1187c6328e439e1
I0508 08:52:52.811044
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
```

```
W0508 08:52:52.811061
                           1 static_autoscaler.go:741] No node group for
node aws:///eu-central-1a/i-0a1187c6328e439e1, skipping
                      1 filter_out_schedulable.go:63] Filtering out
I0508 08:52:52.811096
schedulables
                           1 klogx.go:87] failed to find place for
I0508 08:52:52.811165
default/nginx-55f598f8d-4mcjs: cannot put pod nginx-55f598f8d-4mcjs on any
node
                           1 klogx.go:87] failed to find place for
I0508 08:52:52.811219
default/nginx-55f598f8d-c2hd7 based on similar pods scheduling
I0508 08:52:52.811248
                          1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-kbks8 based on similar pods scheduling
I0508 08:52:52.811272
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-w27bk based on similar pods scheduling
                       1 klogx.go:87] failed to find place for
I0508 08:52:52.811294
default/nginx-55f598f8d-hj92h based on similar pods scheduling
I0508 08:52:52.811322
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-568fd based on similar pods scheduling
I0508 08:52:52.811343
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-rtxs8 based on similar pods scheduling
                           1 klogx.go:87] failed to find place for
I0508 08:52:52.811366
default/nginx-55f598f8d-rjcfs based on similar pods scheduling
default/nginx-55f598f8d-flk7t based on similar pods scheduling
I0508 08:52:52.811416
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-wk5qt based on similar pods scheduling
I0508 08:52:52.811437
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-z946h based on similar pods scheduling
I0508 08:52:52.811459
                           1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-vqp5q based on similar pods scheduling
                          1 klogx.go:87] failed to find place for
10508 08:52:52.811485
default/nginx-55f598f8d-x8vp7 based on similar pods scheduling
I0508 08:52:52.811507
                          1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-dbgfm based on similar pods scheduling
                          1 klogx.go:87] failed to find place for
I0508 08:52:52.811528
default/nginx-55f598f8d-dw9px based on similar pods scheduling
I0508 08:52:52.811556
                       1 klogx.go:87] failed to find place for
default/nginx-55f598f8d-ltb42 based on similar pods scheduling
I0508 08:52:52.811564
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
                           1 filter_out_schedulable.go:83] No schedulable
10508 08:52:52.811571
pods
I0508 08:52:52.811575
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:52:52.811580
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 16 unschedulable pods left
I0508 08:52:52.811595
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
4mcjs is unschedulable
I0508 08:52:52.811600
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
c2hd7 is unschedulable
I0508 08:52:52.811604
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
kbks8 is unschedulable
I0508 08:52:52.811608
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
w27bk is unschedulable
I0508 08:52:52.811611
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
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hj92h is unschedulable
I0508 08:52:52.811616
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
568fd is unschedulable
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:52:52.811623
rtxs8 is unschedulable
I0508 08:52:52.811629
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
ricfs is unschedulable
I0508 08:52:52.811634
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
flk7t is unschedulable
I0508 08:52:52.811638
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
wk5gt is unschedulable
I0508 08:52:52.811641
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
z946h is unschedulable
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:52:52.811645
vgp5g is unschedulable
I0508 08:52:52.811649
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
x8vp7 is unschedulable
I0508 08:52:52.811652
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
dbgfm is unschedulable
I0508 08:52:52.811657
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
dw9px is unschedulable
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:52:52.811660
ltb42 is unschedulable
I0508 08:52:52.811927
                           1 orchestrator.go:109] Upcoming 0 nodes
I0508 08:52:52.812246
                           1 waste.go:55] Expanding Node Group eks-ng-
cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 would waste 100.00% CPU,
100.00% Memory, 100.00% Blended
I0508 08:52:52.812264
                           1 orchestrator.go:193] Best option to resize:
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
10508 08:52:52.812273
                           1 orchestrator.go:197] Estimated 1 nodes
needed in eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
I0508 08:52:52.812290
                           1 orchestrator.go:310] Final scale-up plan:
[\{eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)\}]
I0508 08:52:52.812302
                          1 orchestrator.go:582] Scale-up: setting group
eks-nq-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 size to 2
ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 size to 2
I0508 08:52:52.812456
                           1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"ConfigMap", Namespace:"kube-system",
Name: "cluster-autoscaler-status", UID: "9bfbb9cb-3bb7-42be-ae46-
23fb45cec6e1", APIVersion:"v1", ResourceVersion:"16852", FieldPath:""}):
type: 'Normal' reason: 'ScaledUpGroup' Scale-up: setting group eks-ng-
cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 size to 2 instead of 1 (max:
I0508 08:52:52.935525
                           1 eventing_scale_up_processor.go:47] Skipping
event processing for unschedulable pods since there is a ScaleUp attempt
this loop
                           1 event_sink_logging_wrapper.go:48]
I0508 08:52:52.935527
Event(v1.ObjectReference{Kind:"ConfigMap", Namespace:"kube-system",
Name: "cluster-autoscaler-status", UID: "9bfbb9cb-3bb7-42be-ae46-
23fb45cec6e1", APIVersion:"v1", ResourceVersion:"16852", FieldPath:""}):
type: 'Normal' reason: 'ScaledUpGroup' Scale-up: group eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 size set to 2 instead of 1 (max: 3)
10508 08:52:52.944077
                           1 event_sink_logging_wrapper.go:48]
```

```
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-4mcjs", UID:"14936dbf-cbc0-405a-9fd2-25bee5f2ce62",
APIVersion: "v1", ResourceVersion: "16899", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
10508 08:52:52.951335
                            1 event sink logging wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-c2hd7", UID:"c8bb70c2-e043-4d92-81f7-2d9fe4b160f5",
APIVersion: "v1", ResourceVersion: "16912", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:52.959619
                            1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-kbks8", UID: "752b1346-7218-47bd-a977-fb66e4636248",
APIVersion: "v1", ResourceVersion: "16930", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
                            1 event sink logging wrapper.go:48]
10508 08:52:52.966594
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-w27bk", UID:"511751c5-b15a-473d-a843-7e7bacc15855",
APIVersion: "v1", ResourceVersion: "16909", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:52.972764
                            1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-hj92h", UID: "75d28456-b18f-4a56-880c-add9291742c4",
APIVersion: "v1", ResourceVersion: "16941", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
                           1 event_sink_logging_wrapper.go:48]
10508 08:52:52.978656
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-568fd", UID: "6a541037-0dea-48b7-9eb3-0ec8fd6fa7f5",
APIVersion: "v1", ResourceVersion: "16939", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:52.987573
                           1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-rtxs8", UID: "29196e42-d47c-48d0-b382-c9e86f994921",
APIVersion: "v1", ResourceVersion: "16943", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
                            1 event_sink_logging_wrapper.go:48]
I0508 08:52:52.994681
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-rjcfs", UID: "8b27f6a4-0f2f-4008-bfd9-fa9e3688c70a",
APIVersion: "v1", ResourceVersion: "16894", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:53.000017
                            1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-flk7t", UID:"b5546e27-0c82-45b6-8e34-64f973412172",
APIVersion: "v1", ResourceVersion: "16926", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:53.020381
                            1 event_sink_logging_wrapper.go:48]
```

```
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-wk5gt", UID:"4f8b1fd7-01d4-44c1-812d-6d442f96d375",
APIVersion: "v1", ResourceVersion: "16933", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:53.213648
                           1 request.go:628] Waited for 193.195364ms due
to client-side throttling, not priority and fairness, request:
POST:https://10.100.0.1:443/api/v1/namespaces/default/events
I0508 08:52:53.220311
                           1 event sink logging wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-z946h", UID:"e1f33faa-4865-497e-a045-6847b9e439c0",
APIVersion: "v1", ResourceVersion: "16936", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:53.412659
                           1 request.go:628] Waited for 192.245035ms due
to client-side throttling, not priority and fairness, request:
POST:https://10.100.0.1:443/api/v1/namespaces/default/events
                           1 event sink logging wrapper.go:48]
I0508 08:52:53.418891
Event(v1.0bjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-vqp5q", UID:"73b69e7d-e852-422e-845e-ed00b72921dc",
APIVersion: "v1", ResourceVersion: "16937", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
                           1 request.go:628] Waited for 194.294081ms due
I0508 08:52:53.613270
to client-side throttling, not priority and fairness, request:
POST:https://10.100.0.1:443/api/v1/namespaces/default/events
I0508 08:52:53.622180
                          1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-x8vp7", UID:"7dee1bc0-3c19-47a2-aacd-312ac9d1d2a8",
APIVersion: "v1", ResourceVersion: "16896", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:53.813567
                       1 request.go:628] Waited for 191.304691ms due
to client-side throttling, not priority and fairness, request:
POST: https://10.100.0.1:443/api/v1/namespaces/default/events
I0508 08:52:53.821065
                       1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-dbgfm", UID: "e8a7c3fc-5c5e-41fc-8a2b-211107486567",
APIVersion: "v1", ResourceVersion: "16919", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
                           1 request.go:628] Waited for 192.310222ms due
I0508 08:52:54.013457
to client-side throttling, not priority and fairness, request:
POST: https://10.100.0.1:443/api/v1/namespaces/default/events
I0508 08:52:54.023011
                           1 event_sink_logging_wrapper.go:48]
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-dw9px", UID:"ddddb68c-5019-4692-82aa-f42b9208f058",
APIVersion: "v1", ResourceVersion: "16921", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:54.213266
                           1 request.go:628] Waited for 190.155013ms due
to client-side throttling, not priority and fairness, request:
POST:https://10.100.0.1:443/api/v1/namespaces/default/events
```

```
Event(v1.ObjectReference{Kind:"Pod", Namespace:"default", Name:"nginx-
55f598f8d-ltb42", UID: "2a933612-9d16-435b-8498-101bac03a939",
APIVersion: "v1", ResourceVersion: "16924", FieldPath: ""}): type: 'Normal'
reason: 'TriggeredScaleUp' pod triggered scale-up: [{eks-ng-cc1c9586-
e0cb5767-5310-8285-c96d-77388791a788 1->2 (max: 3)}]
I0508 08:52:54.413193
                           1 request.go:628] Waited for 193.481698ms due
to client-side throttling, not priority and fairness, request:
POST: https://10.100.0.1:443/api/v1/namespaces/default/events
                           1 node instances cache.go:156] Start
I0508 08:53:01.988369
refreshing cloud provider node instances cache
I0508 08:53:01.988406
                      1 node_instances_cache.go:168] Refresh cloud
provider node instances cache finished, refresh took 10.282µs
                           1 static_autoscaler.go:289] Starting main loop
10508 08:53:02.950897
10508 08:53:02.950967
                           1 auto_scaling_groups.go:369] Regenerating
instance to ASG map for ASG names: []
I0508 08:53:02.950981
                           1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
                          1 auto scaling groups.go:142] Updating ASG
I0508 08:53:03.064961
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
I0508 08:53:03.064991
                           1 aws_wrapper.go:703] 0 launch configurations
to query
10508 08:53:03.064998
                           1 aws_wrapper.go:704] 0 launch templates to
query
I0508 08:53:03.065018
                           1 aws_wrapper.go:724] Successfully queried 0
launch configurations
10508 08:53:03.065024
                           1 aws_wrapper.go:735] Successfully queried 0
launch templates
                           1 aws_wrapper.go:746] Successfully queried
I0508 08:53:03.065031
instance requirements for 0 ASGs
I0508 08:53:03.065041
                           1 aws manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:54:03.065037218 +0000 UTC m=+327.857108242
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
10508 08:53:03.065863
                           1 static_autoscaler.go:407] 1 unregistered
nodes present
10508 08:53:03.066074
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:53:03.066153
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
x8vp7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
I0508 08:53:03.066187
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
dbgfm can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:03.066232
dw9px can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
I0508 08:53:03.066260
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
ltb42 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
I0508 08:53:03.066302
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
4mcjs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
```

```
8285-c96d-77388791a788-2606258838189952279-upcoming-0
I0508 08:53:03.066331
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
c2hd7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
10508 08:53:03.066370
kbks8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
10508 08:53:03.066398
w27bk can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:03.066440
hj92h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
10508 08:53:03.066469
vgp5g can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
I0508 08:53:03.066509
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
568fd can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
10508 08:53:03.066535
rtxs8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
10508 08:53:03.066564
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
rjcfs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
10508 08:53:03.066606
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
flk7t can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:03.066635
wk5gt can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:03.066676
z946h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2606258838189952279-upcoming-0
                            1 filter_out_schedulable.go:120] 16 pods
I0508 08:53:03.066689
marked as unschedulable can be scheduled.
10508 08:53:03.066701
                            1 filter_out_schedulable.go:75] Schedulable
pods present
I0508 08:53:03.066707
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:53:03.066713
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:53:03.066751
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:53:03.066770
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:53:03.066825
                            1 klogx.go:87] Node ip-192-168-72-73.eu-
central-1.compute.internal - cpu utilization 0.233161
I0508 08:53:03.066866
                            1 legacy.go:166] Finding additional 1
candidates for scale down.
10508 08:53:03.066874
                            1 cluster.go:155] ip-192-168-72-73.eu-central-
1.compute.internal for removal
I0508 08:53:03.066916
                            1 cluster.go:164] node ip-192-168-72-73.eu-
central-1.compute.internal cannot be removed: pod annotated as not safe to
```

```
evict present: cluster-autoscaler-6768dd59d5-hfffq
10508 08:53:03.066929
                            1 legacy.go:193] 1 nodes found to be
unremovable in simulation, will re-check them at 2025-05-08
08:58:02.950868024 +0000 UTC m=+567.742939159
10508 08:53:03.066973
                           1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:53:13.086773
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:53:13.087162
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:53:13.087387
                            1 static_autoscaler.go:407] 1 unregistered
nodes present
I0508 08:53:13.087516
                            1 filter out schedulable.go:63] Filtering out
schedulables
I0508 08:53:13.087591
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
ltb42 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087632
x8vp7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.087671
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
dbgfm can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.087710
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
dw9px can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087744
4mcjs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087786
c2hd7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087821
kbks8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087855
w27bk can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087894
hi92h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.087928
z946h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.087960
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
vqp5q can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.087991
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
568fd can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
```

```
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.088027
                       1 klogx.go:87] Pod default/nginx-55f598f8d-
rtxs8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
I0508 08:53:13.088059
                       1 klogx.go:87] Pod default/nginx-55f598f8d-
ricfs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
flk7t can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                   1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:13.088129
wk5qt can be moved to template-node-for-eks-nq-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-2333583170008653194-upcoming-0
                       1 filter_out_schedulable.go:120] 16 pods
I0508 08:53:13.088147
marked as unschedulable can be scheduled.
I0508 08:53:13.088163
                       1 filter_out_schedulable.go:75] Schedulable
pods present
I0508 08:53:13.088170
                       1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:53:13.088176
                        1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
                       1 static_autoscaler.go:554] No unschedulable
I0508 08:53:13.088202
pods
I0508 08:53:13.088222
                       1 static_autoscaler.go:577] Calculating
unneeded nodes
ignoring 1 nodes unremovable in the last 5m0s
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:53:23.103576
                       1 static_autoscaler.go:289] Starting main loop
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
nodes present
schedulables
10508 08:53:23.104435
                       1 klogx.go:87] Pod default/nginx-55f598f8d-
w27bk can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104475
                       1 klogx.go:87] Pod default/nginx-55f598f8d-
hj92h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104507
                       1 klogx.go:87] Pod default/nginx-55f598f8d-
wk5gt can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
                      1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:23.104541
z946h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
```

```
vqp5q can be moved to template-node-for-eks-nq-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104610
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
568fd can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104643
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
rtxs8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:23.104675
rjcfs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104708
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
flk7t can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104742
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
dw9px can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104777
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
ltb42 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104809
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
x8vp7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104841
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
dbgfm can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:23.104875
kbks8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104910
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
4mcis can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104946
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
c2hd7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-3233338539567257085-upcoming-0
I0508 08:53:23.104964
                           1 filter_out_schedulable.go:120] 16 pods
marked as unschedulable can be scheduled.
I0508 08:53:23.104978
                           1 filter_out_schedulable.go:75] Schedulable
pods present
I0508 08:53:23.104987
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:53:23.104994
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:53:23.105020
                           1 static_autoscaler.go:554] No unschedulable
I0508 08:53:23.105039
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:53:23.105064
                           1 eligibility.go:102] Scale-down calculation:
ignoring 1 nodes unremovable in the last 5m0s
I0508 08:53:23.105102
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
```

```
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:53:33.120049
                            1 static_autoscaler.go:289] Starting main loop
                            1 aws_manager.go:188] Found multiple
I0508 08:53:33.120376
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:53:33.120660
                            1 filter out schedulable.go:63] Filtering out
schedulables
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:33.120727
x8vp7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120761
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
dbgfm can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120784
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
dw9px can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120805
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
ltb42 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:33.120832
4mcjs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120853
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
c2hd7 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0\\
I0508 08:53:33.120872
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
kbks8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120890
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
w27bk can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
I0508 08:53:33.120915
hj92h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120932
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
568fd can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120949
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
rtxs8 can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120966
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
rjcfs can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.120990
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
flk7t can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.121008
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
wk5gt can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
I0508 08:53:33.121024
                           1 klogx.go:87] Pod default/nginx-55f598f8d-
z946h can be moved to template-node-for-eks-ng-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
```

```
I0508 08:53:33.121040
                            1 klogx.go:87] Pod default/nginx-55f598f8d-
vqp5q can be moved to template-node-for-eks-nq-cc1c9586-e0cb5767-5310-
8285-c96d-77388791a788-7963849141211321213-upcoming-0
                            1 filter_out_schedulable.go:120] 16 pods
I0508 08:53:33.121049
marked as unschedulable can be scheduled.
I0508 08:53:33.121060
                           1 filter_out_schedulable.go:75] Schedulable
pods present
I0508 08:53:33.121067
                            1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:53:33.121071
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:53:33.121087
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:53:33.121098
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:53:33.121115
                            1 eligibility.go:102] Scale-down calculation:
ignoring 1 nodes unremovable in the last 5m0s
I0508 08:53:33.121141
                           1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:53:43.134500
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:53:43.134933
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                            1 clusterstate.go:258] Scale up in group eks-
I0508 08:53:43.135153
ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788 finished successfully in
50.199055563s
I0508 08:53:43.135202
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:53:43.135214
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:53:43.135225
                           1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
I0508 08:53:43.135231
daemon set pods
I0508 08:53:43.135236
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:53:43.135255
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:53:43.135274
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:53:43.135306
                            1 klogx.go:87] Node ip-192-168-16-40.eu-
central-1.compute.internal - cpu utilization 0.077720
I0508 08:53:43.135316
                            1 eligibility.go:102] Scale-down calculation:
ignoring 1 nodes unremovable in the last 5m0s
I0508 08:53:43.135346
                            1 legacy.go:166] Finding additional 1
candidates for scale down.
I0508 08:53:43.135353
                            1 cluster.go:155] ip-192-168-16-40.eu-central-
1.compute.internal for removal
I0508 08:53:43.135444
                            1 klogx.go:87] failed to find place for
```

```
default/nginx-55f598f8d-568fd: cannot put pod nginx-55f598f8d-568fd on any
node
I0508 08:53:43.135452
                            1 cluster.go:175] node ip-192-168-16-40.eu-
central-1.compute.internal is not suitable for removal: can reschedule
only 0 out of 16 pods
I0508 08:53:43.135459
                            1 legacy.go:193] 1 nodes found to be
unremovable in simulation, will re-check them at 2025-05-08
08:58:43.134459119 +0000 UTC m=+607.926530191
                            1 static autoscaler.go:624] Scale down status:
I0508 08:53:43.135480
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:53:53.148999
                            1 static autoscaler.go:289] Starting main loop
I0508 08:53:53.149414
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:53:53.149615
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:53:53.149632
                            1 filter out schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:53:53.149644
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:53:53.149652
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:53:53.149658
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:53:53.149683
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:53:53.149705
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:53:53.149729
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                        1 static_autoscaler.go:624] Scale down status:
I0508 08:53:53.149759
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:54:03.162927
                            1 static_autoscaler.go:289] Starting main loop
                            1 auto_scaling_groups.go:369] Regenerating
I0508 08:54:03.163006
instance to ASG map for ASG names: []
I0508 08:54:03.163020
                            1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:54:03.259860
                            1 auto_scaling_groups.go:142] Updating ASG
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
                           1 aws_wrapper.go:703] 0 launch configurations
10508 08:54:03.259890
to query
I0508 08:54:03.259896
                            1 aws_wrapper.go:704] 0 launch templates to
query
I0508 08:54:03.259903
                            1 aws_wrapper.go:724] Successfully queried 0
```

```
launch configurations
I0508 08:54:03.259917
                            1 aws_wrapper.go:735] Successfully queried 0
launch templates
I0508 08:54:03.259926
                            1 aws_wrapper.go:746] Successfully queried
instance requirements for 0 ASGs
I0508 08:54:03.259937
                            1 aws manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:55:03.259932979 +0000 UTC m=+388.052003999
                           1 aws manager.go:188] Found multiple
10508 08:54:03.260816
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:54:03.261064
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:54:03.261377
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:54:03.261399
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:54:03.261405
                            1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:54:03.261410
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:54:03.261436
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:54:03.261472
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:54:03.261512
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:54:03.261566
                            1 static autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:54:13.276739
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:54:13.277609
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:54:13.278029
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:54:13.278042
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:54:13.278053
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter_out_daemon_sets.go:40] Filtering out
I0508 08:54:13.278058
daemon set pods
I0508 08:54:13.278063
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:54:13.278097
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:54:13.278115
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:54:13.278138
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
```

```
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:54:23.307060
                          1 static autoscaler.go:289] Starting main loop
I0508 08:54:23.307462
                          1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
10508 08:54:23.307654
                          1 filter_out_schedulable.go:63] Filtering out
schedulables
10508 08:54:23.307668
                          1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:54:23.307676
                          1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:54:23.307680
                          1 filter out daemon sets.go:40] Filtering out
daemon set pods
10508 08:54:23.307683
                          1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:54:23.307699
                          1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:54:23.307711
                          1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:54:23.307726
                          1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:54:33.322149
                          1 static_autoscaler.go:289] Starting main loop
10508 08:54:33.322649
                          1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:54:33.322891
                          1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:54:33.322904
                          1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
                          1 filter_out_schedulable.go:83] No schedulable
10508 08:54:33.322914
pods
                          1 filter_out_daemon_sets.go:40] Filtering out
10508 08:54:33.322919
daemon set pods
I0508 08:54:33.322924
                          1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:54:33.322949
                          1 static_autoscaler.go:554] No unschedulable
pods
10508 08:54:33.322968
                          1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:54:33.322999
                          1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
```

```
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:54:43.334004
                          1 static autoscaler.go:289] Starting main loop
I0508 08:54:43.334563
                          1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                          1 filter_out_schedulable.go:63] Filtering out
I0508 08:54:43.334838
schedulables
10508 08:54:43.334869
                          1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:54:43.334880
                          1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:54:43.334887
                          1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:54:43.334891
                          1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:54:43.334913
                          1 static_autoscaler.go:554] No unschedulable
pods
10508 08:54:43.334929
                          1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:54:43.334952
                          1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:54:45.897104
                          1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.StorageClass total 7 items
received
I0508 08:54:48.238091
                          1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.Service total 6 items
received
                          1 static_autoscaler.go:289] Starting main loop
10508 08:54:53.348601
I0508 08:54:53.348949
                          1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:54:53.349149
                          1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:54:53.349163
                          1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:54:53.349174
                          1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:54:53.349182
                          1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
                          1 filter_out_daemon_sets.go:49] Filtered out 0
10508 08:54:53.349188
daemon set pods, 0 unschedulable pods left
```

```
I0508 08:54:53.349210
                           1 static_autoscaler.go:554] No unschedulable
pods
                           1 static_autoscaler.go:577] Calculating
I0508 08:54:53.349233
unneeded nodes
I0508 08:54:53.349255
                           1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                           1 static autoscaler.go:624] Scale down status:
10508 08:54:53.349285
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:55:01.988533
                           1 node instances cache.go:156] Start
refreshing cloud provider node instances cache
I0508 08:55:01.988565
                           1 node instances cache.go:168] Refresh cloud
provider node instances cache finished, refresh took 10.977µs
I0508 08:55:03.363223
                           1 auto scaling groups.go:369] Regenerating
instance to ASG map for ASG names: []
                           1 auto_scaling_groups.go:376] Regenerating
I0508 08:55:03.363237
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:55:03.459479
                           1 auto_scaling_groups.go:142] Updating ASG
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
I0508 08:55:03.459508
                           1 aws wrapper.go:703] 0 launch configurations
to query
                           1 aws_wrapper.go:704] 0 launch templates to
10508 08:55:03.459515
query
I0508 08:55:03.459522
                           1 aws_wrapper.go:724] Successfully queried 0
launch configurations
I0508 08:55:03.459528
                           1 aws wrapper.go:735] Successfully gueried 0
launch templates
                           1 aws_wrapper.go:746] Successfully queried
I0508 08:55:03.459535
instance requirements for 0 ASGs
I0508 08:55:03.459545
                           1 aws_manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:56:03.459541106 +0000 UTC m=+448.251612124
I0508 08:55:03.459949
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:55:03.460160
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:55:03.460175
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:55:03.460185
                           1 filter_out_schedulable.go:83] No schedulable
I0508 08:55:03.460191
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:55:03.460195
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:55:03.460221
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:55:03.460242
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
```

```
10508 08:55:03.460268
                           1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                      1 static autoscaler.go:624] Scale down status:
I0508 08:55:03.460309
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:55:13.472900
                            1 static autoscaler.go:289] Starting main loop
                           1 aws_manager.go:188] Found multiple
I0508 08:55:13.473233
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                            1 managed_nodegroup_cache.go:136] Failed to
E0508 08:55:13.556158
query the managed nodegroup ng-cc1c9586 for the cluster my-cluster while
looking for labels/taints/tags: AccessDeniedException: User:
arn:aws:sts::524196012679:assumed-
role/EKSAutoScalerRole/1746694137844533326 is not authorized to perform:
eks:DescribeNodegroup on resource: arn:aws:eks:eu-central-
1:524196012679:nodegroup/my-cluster/ng-cc1c9586/e0cb5767-5310-8285-c96d-
77388791a788
E0508 08:55:13.556185
                            1 aws manager.go:299] Failed to get labels
from EKS DescribeNodegroup API for nodegroup ng-cc1c9586 in cluster my-
cluster because AccessDeniedException: User:
arn:aws:sts::524196012679:assumed-
role/EKSAutoScalerRole/1746694137844533326 is not authorized to perform:
eks:DescribeNodegroup on resource: arn:aws:eks:eu-central-
1:524196012679:nodegroup/my-cluster/ng-cc1c9586/e0cb5767-5310-8285-c96d-
77388791a788.
I0508 08:55:13.556332
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:55:13.556348
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:55:13.556359
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:55:13.556369
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
                            1 filter_out_daemon_sets.go:49] Filtered out 0
I0508 08:55:13.556374
daemon set pods, 0 unschedulable pods left
I0508 08:55:13.556398
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:55:13.556420
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:55:13.556449
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:55:13.556487
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:55:16.240445
                           1 reflector.go:788] k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:338: Watch close - *v1.Job total 7
items received
```

```
go/informers/factory.go:150: Watch close - *v1.CSINode total 11 items
received
I0508 08:55:23.570600
                           1 static_autoscaler.go:289] Starting main loop
I0508 08:55:23.571160
                           1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:55:23.572112
                           1 filter out schedulable.go:63] Filtering out
schedulables
I0508 08:55:23.572129
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:55:23.572152
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:55:23.572176
                           1 filter out daemon sets.go:40] Filtering out
daemon set pods
                           1 filter_out_daemon_sets.go:49] Filtered out 0
I0508 08:55:23.572201
daemon set pods, 0 unschedulable pods left
I0508 08:55:23.572478
                           1 static autoscaler.go:554] No unschedulable
pods
I0508 08:55:23.572537
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:55:23.572596
                           1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                       1 static autoscaler.go:624] Scale down status:
I0508 08:55:23.572655
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:55:33.584868
                           1 static autoscaler.go:289] Starting main loop
10508 08:55:33.585218
                          1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:55:33.585429
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:55:33.585445
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:55:33.585456
                           1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:55:33.585465
                           1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:55:33.585471
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:55:33.585498
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:55:33.585522
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:55:33.585547
                           1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:55:33.585583
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
```

```
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:55:38.799190
                           1 reflector.go:788] k8s.io/client-
qo/informers/factory.go:150: Watch close - *v1.CSIDriver total 8 items
received
10508 08:55:43.598603
                           1 static_autoscaler.go:289] Starting main loop
                           1 aws manager.go:188] Found multiple
I0508 08:55:43.599116
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:55:43.599377
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
10508 08:55:43.599389
                           1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:55:43.599399
                           1 filter_out_schedulable.go:83] No schedulable
pods
10508 08:55:43.599404
                           1 filter out daemon sets.go:40] Filtering out
daemon set pods
10508 08:55:43.599409
                           1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:55:43.599430
                           1 static_autoscaler.go:554] No unschedulable
pods
10508 08:55:43.599447
                           1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:55:43.599470
                           1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:55:44.997291
                           1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.Pod total 130 items
received
I0508 08:55:45.837611
                           1 reflector.go:788] k8s.io/autoscaler/cluster-
autoscaler/utils/kubernetes/listers.go:320: Watch close - *v1.DaemonSet
total 19 items received
                           1 reflector.go:788] k8s.io/autoscaler/cluster-
10508 08:55:52.438004
autoscaler/utils/kubernetes/listers.go:347: Watch close - *v1.ReplicaSet
total 31 items received
10508 08:55:53.615284
                           1 static_autoscaler.go:289] Starting main loop
I0508 08:55:53.615756
                           1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:55:53.616008
                           1 filter_out_schedulable.go:63] Filtering out
schedulables
                           1 filter_out_schedulable.go:120] 0 pods marked
I0508 08:55:53.616023
as unschedulable can be scheduled.
I0508 08:55:53.616034
                           1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:55:53.616040
                           1 filter_out_daemon_sets.go:40] Filtering out
```

```
daemon set pods
I0508 08:55:53.616046
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:55:53.616069
                            1 static_autoscaler.go:554] No unschedulable
sbog
I0508 08:55:53.616088
                            1 static autoscaler.go:577] Calculating
unneeded nodes
I0508 08:55:53.616111
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                           1 static autoscaler.go:624] Scale down status:
I0508 08:55:53.616144
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:55:59.799278
                            1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.Namespace total 8 items
received
10508 08:56:00.037096
                            1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.PodDisruptionBudget total 9
items received
10508 08:56:03.629350
                            1 static autoscaler.go:289] Starting main loop
                            1 auto_scaling_groups.go:369] Regenerating
I0508 08:56:03.629421
instance to ASG map for ASG names: []
10508 08:56:03.629437
                            1 auto_scaling_groups.go:376] Regenerating
instance to ASG map for ASG tags: map[k8s.io/cluster-autoscaler/enabled:
k8s.io/cluster-autoscaler/my-cluster:]
I0508 08:56:03.725766
                            1 auto scaling groups.go:142] Updating ASG
eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-77388791a788
I0508 08:56:03.725798
                            1 aws_wrapper.go:703] 0 launch configurations
to query
10508 08:56:03.725804
                            1 aws_wrapper.go:704] 0 launch templates to
query
I0508 08:56:03.725810
                            1 aws_wrapper.go:724] Successfully queried 0
launch configurations
I0508 08:56:03.725816
                            1 aws_wrapper.go:735] Successfully queried 0
launch templates
                            1 aws_wrapper.go:746] Successfully queried
I0508 08:56:03.725823
instance requirements for 0 ASGs
10508 08:56:03.725834
                           1 aws_manager.go:132] Refreshed ASG list, next
refresh after 2025-05-08 08:57:03.725830092 +0000 UTC m=+508.517901112
                            1 aws_manager.go:188] Found multiple
I0508 08:56:03.726240
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:56:03.726463
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
I0508 08:56:03.726477
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
10508 08:56:03.726490
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:56:03.726495
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:56:03.726499
                            1 filter_out_daemon_sets.go:49] Filtered out 0
```

```
daemon set pods, 0 unschedulable pods left
I0508 08:56:03.726522
                            1 static autoscaler.go:554] No unschedulable
pods
10508 08:56:03.726539
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
10508 08:56:03.726560
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
                           1 static autoscaler.go:624] Scale down status:
10508 08:56:03.726589
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573,220481230 scaleDownForbidden=false
scaleDownInCooldown=true
10508 08:56:05.636905
                            1 reflector.go:788] k8s.io/client-
qo/informers/factory.go:150: Watch close - *v1.PersistentVolumeClaim total
8 items received
I0508 08:56:13.738211
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:56:13.739068
                            1 aws manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
                            1 filter out schedulable.go:63] Filtering out
I0508 08:56:13.739420
schedulables
I0508 08:56:13.739437
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:56:13.739447
                            1 filter_out_schedulable.go:83] No schedulable
pods
I0508 08:56:13.739454
                            1 filter out daemon sets.go:40] Filtering out
daemon set pods
I0508 08:56:13.739459
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:56:13.739484
                           1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:56:13.739503
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:56:13.739526
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:56:13.739567
                           1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:56:17.898946
                            1 reflector.go:788] k8s.io/client-
go/informers/factory.go:150: Watch close - *v1.StatefulSet total 8 items
received
I0508 08:56:23.794426
                            1 static_autoscaler.go:289] Starting main loop
I0508 08:56:23.794808
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
I0508 08:56:23.795022
                            1 filter_out_schedulable.go:63] Filtering out
schedulables
10508 08:56:23.795037
                            1 filter_out_schedulable.go:120] 0 pods marked
```

```
as unschedulable can be scheduled.
10508 08:56:23.795048
                            1 filter out schedulable.go:83] No schedulable
pods
I0508 08:56:23.795053
                            1 filter_out_daemon_sets.go:40] Filtering out
daemon set pods
I0508 08:56:23.795057
                            1 filter out daemon sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
I0508 08:56:23.795077
                            1 static autoscaler.go:554] No unschedulable
pods
10508 08:56:23.795094
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:56:23.795115
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:56:23.795146
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
I0508 08:56:33.809366
                            1 static autoscaler.go:289] Starting main loop
10508 08:56:33.809745
                            1 aws_manager.go:188] Found multiple
availability zones for ASG "eks-ng-cc1c9586-e0cb5767-5310-8285-c96d-
77388791a788"; using eu-central-1a for failure-
domain.beta.kubernetes.io/zone label
10508 08:56:33.809925
                            1 filter out schedulable.go:63] Filtering out
schedulables
10508 08:56:33.809939
                            1 filter_out_schedulable.go:120] 0 pods marked
as unschedulable can be scheduled.
I0508 08:56:33.809950
                            1 filter_out_schedulable.go:83] No schedulable
pods
                            1 filter out daemon sets.go:40] Filtering out
I0508 08:56:33.809955
daemon set pods
I0508 08:56:33.809961
                            1 filter_out_daemon_sets.go:49] Filtered out 0
daemon set pods, 0 unschedulable pods left
10508 08:56:33.809984
                            1 static_autoscaler.go:554] No unschedulable
pods
I0508 08:56:33.810005
                            1 static_autoscaler.go:577] Calculating
unneeded nodes
I0508 08:56:33.810030
                            1 eligibility.go:102] Scale-down calculation:
ignoring 2 nodes unremovable in the last 5m0s
I0508 08:56:33.810058
                            1 static_autoscaler.go:624] Scale down status:
lastScaleUpTime=2025-05-08 08:52:52.810441026 +0000 UTC m=+257.602512044
lastScaleDownDeleteTime=2025-05-08 07:49:01.987447748 +0000 UTC
m=-3573.220481230 lastScaleDownFailTime=2025-05-08 07:49:01.987447748
+0000 UTC m=-3573.220481230 scaleDownForbidden=false
scaleDownInCooldown=true
```