eksctl EKS cluster CLI

CONCEPTS

eksctl turns each cluster into CloudFormation stacks; a cluster and each node group are separate stacks you can inspect in AWS.

Pass a ClusterConfig file (-f) instead of long flag lists: it is reviewable, repeatable and works for create, upgrade and delete.

CREATE CLUSTER

`eksctl create cluster`
Default cluster: 2 managed m5.large nodes

`eksctl create cluster -f` *`<file>`*
Create from a ClusterConfig file

`--name` *`<name>`* **`--region`** *`<region>`*
Name and region of the cluster

CLUSTERCONFIG FILE

Minimal cluster.yaml

```
apiVersion: eksctl.io/v1alpha5
kind: ClusterConfig
metadata:
  name: <name>
  region: <region>
managedNodeGroups:
  - name: ng-1
    instanceType: m5.large
    desiredCapacity: 3
    minSize: 1
    maxSize: 5
```

INSPECT CLUSTERS

`eksctl get cluster`
List clusters in the region

NODE GROUPS

`eksctl get nodegroup --cluster` *`<name>`*
List node groups

`eksctl create nodegroup --cluster` *`<name>`* **`--name`** *`<ng>`*
Add a node group

NODE GROUPS (cont.)

`eksctl scale nodegroup --cluster` *`<name>`* **`--name`** *`<ng>`* **`--nodes`** *`<n>`*
Change desired size

KUBECONFIG

`eksctl utils write-kubeconfig --cluster` *`<name>`*
Add the cluster to your kubeconfig

UPGRADES

`eksctl upgrade cluster --name` *`<name>`*
Preview the control-plane upgrade

`--version` *`<k8s-version>`* **`--approve`**
Apply the upgrade, one minor step

Upgrade order: control plane, then node groups, then the default add-ons.

IAM AND ADD-ONS

`eksctl create iamserviceaccount --cluster` *`<name>`* **`--name`** *`<sa>`* **`--namespace`** *`<ns>`* **`--attach-policy-arn`** *`<arn>`*
Bind an IAM role to a service account

`eksctl get addon --cluster` *`<name>`*
List installed add-ons

DELETE CLUSTER

`eksctl delete cluster --name` *`<name>`* **`--wait`**
Delete and report errors

`eksctl delete cluster -f` *`<file>`* **`--wait`**
Delete the cluster from its config

Deletion is destructive: load balancers, volumes or ENIs created by workloads can block it. Remove them first, or delete the leftover CloudFormation stacks by hand.