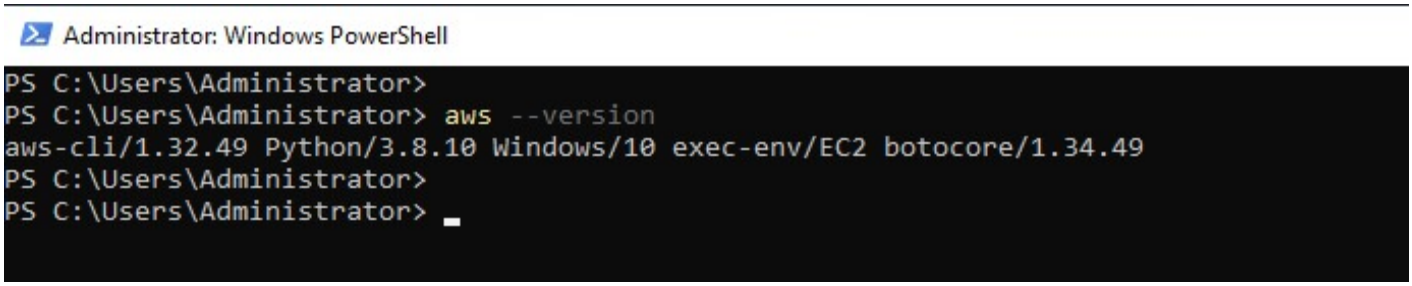
Install AWS CLI

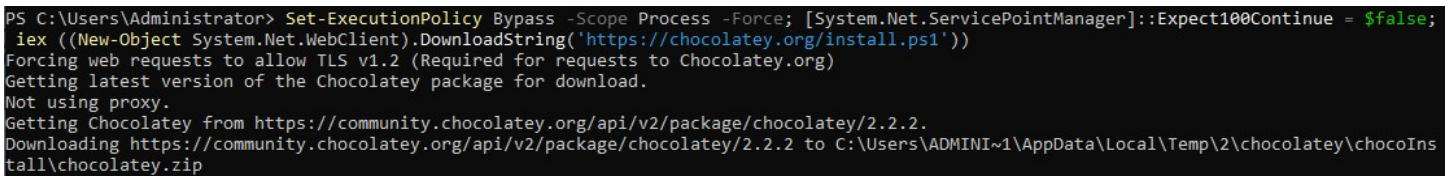
Official AWS CLI download page: https://docs.aws.amazon.com/cli/latest/userguide/install-windows.html

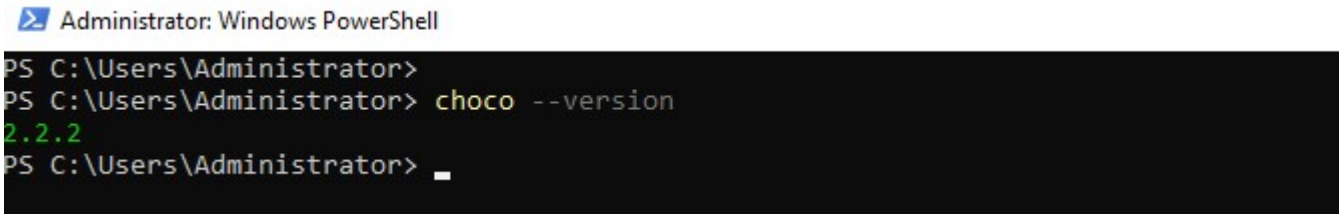
- **Download the installer:**
  1. Visit the official AWS CLI download page: https://docs.aws.amazon.com/cli/latest/userguide/install-windows.html
  - Choose the 64-bit Windows installer (MSI) under "Latest Version."
- **Run the installer:**
  - Double-click the downloaded installer file.
  - Follow the on-screen instructions, ensuring you choose the option to "Add AWS CLI to PATH". This allows you to run the `aws` command from any command prompt.
- **Verify installation:**
  - Open a command prompt and type `aws --version`. If successful, you should see the installed version displayed.



Install Chocolatey (Package Manager for Windows)

```
Set-ExecutionPolicy Bypass -Scope Process -Force;
[System.Net.ServicePointManager]::Expect100Continue = $false; iex ((New-Object
System.Net.WebClient).DownloadString('https://chocolatey.org/install.ps1'))
```

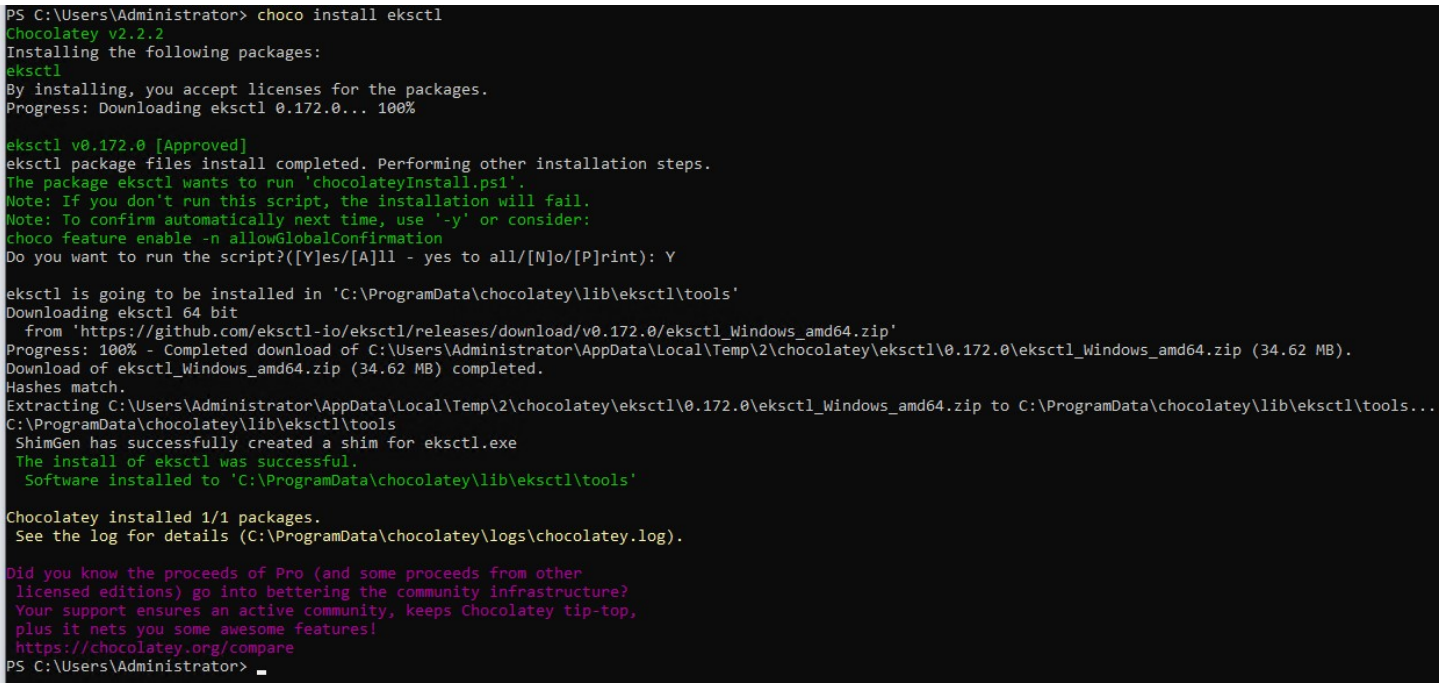


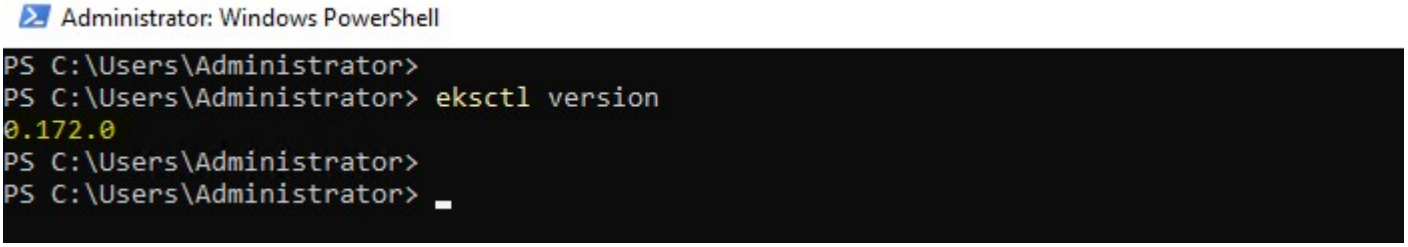


Install EKSCTL Tool

Reference Links

- Installation - eksctl
- Setting up to use Amazon EKS - Amazon EKS





Install KUBECTL Tool

Reference Links

- https://kubernetes.io/docs/tasks/tools/install-kubectl/
- Install and Set Up kubectl on Windows | Kubernetes

```
PS C:\Users\Administrator> choco install kubernetes-cli
Chocolatey v2.2.2
Installing the following packages:
kubernetes-cli
By installing, you accept licenses for the packages.
Progress: Downloading kubernetes-cli 1.29.1... 100%

kubernetes-cli v1.29.1 [Approved]
kubernetes-cli package files install completed. Performing other installation steps.
The package kubernetes-cli wants to run 'chocolateyInstall.ps1'.
Note: If you don't run this script, the installation will fail.
Note: To confirm automatically next time, use '-y' or consider:
choco feature enable -n allowGlobalConfirmation
Do you want to run the script?([Y]es/[A]ll - yes to all/[N]o/[P]rint): Y

Extracting 64-bit C:\ProgramData\chocolatey\lib\kubernetes-cli\tools\kubernetes-client-windows-amd64.tar.gz to C:\ProgramData\
C:\ProgramData\chocolatey\lib\kubernetes-cli\tools
Extracting 64-bit C:\ProgramData\chocolatey\lib\kubernetes-cli\tools\kubernetes-client-windows-amd64.tar to C:\ProgramData\cho
C:\ProgramData\chocolatey\lib\kubernetes-cli\tools
 ShimGen has successfully created a shim for kubectl-convert.exe
 ShimGen has successfully created a shim for kubectl.exe
 The install of kubernetes-cli was successful.
  Software installed to 'C:\ProgramData\chocolatey\lib\kubernetes-cli\tools'

Chocolatey installed 1/1 packages.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Enjoy using Chocolatey? Explore more amazing features to take your
experience to the next level at
 https://chocolatey.org/compare
PS C:\Users\Administrator>
```

```
Administrator: Windows PowerShell
PS C:\Users\Administrator>
PS C:\Users\Administrator> kubectl version --client
Client Version: v1.29.1
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
PS C:\Users\Administrator>
PS C:\Users\Administrator>
```

```
PS C:\Users\Administrator> aws configure
AWS Access Key ID [None]: AKIAZEZ7WQBM5AX5WE5O
AWS Secret Access Key [None]: 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
Default region name [None]: ap-south-1
Default output format [None]: json
PS C:\Users\Administrator>
```

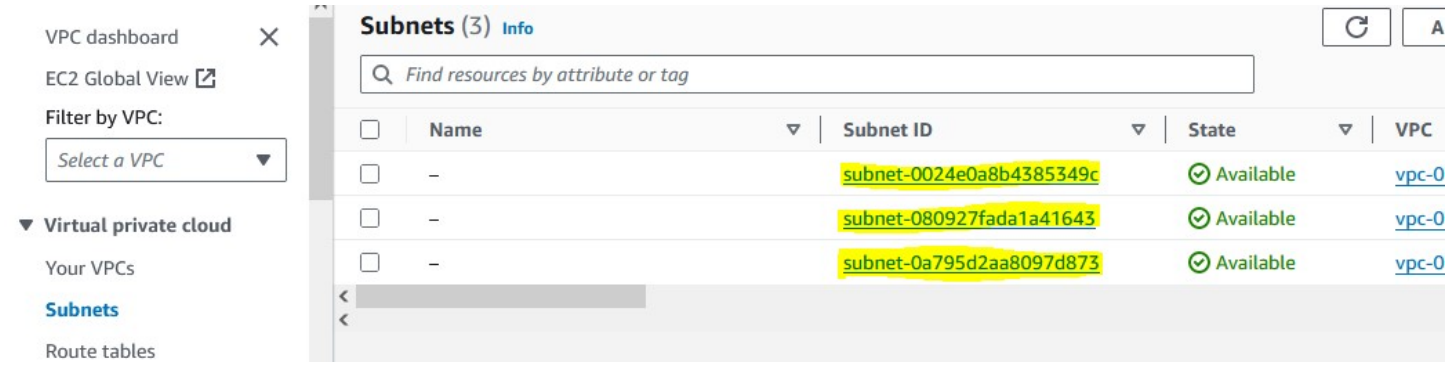
Command to Provision an EKS Cluster

For Private Subnet:

```
eksctl create cluster -r eu-central-1 --name Testing-new-k8s-cluster --version 1.25
--nodegroup-name test-new-dev-workers --node-type t3.medium --nodes 2 --nodes-min 1
--nodes-max 3 --vpc- private-subnets=subnet-0889f4d7b16417748d,subnet-
0ebca37dc8f461b1d -P
```

For Public Subnet:

```
eksctl create cluster -r ap-south-1 --name my-cluster --version 1.25 --nodegroup-
name my-workers --node-type t2.micro --nodes 2 --nodes-min 1 --nodes-max 3 --vpc-
public-subnets=subnet-0024e0a8b4385349c,subnet-080927fada1a41643
```




```
PS C:\Users\Administrator> eksctl create cluster -r ap-south-1 --name my-cluster --version 1.25 --nodegroup-name my-workers --node-type t2.micro --nodes
2 --nodes-min 1 --nodes-max 3 --vpc-public-subnets=subnet-0024e0a8b4385349c,subnet-080927fada1a41643
2024-02-25 07:30:08 [ℹ]  eksctl version 0.172.0
2024-02-25 07:30:08 [ℹ]  using region ap-south-1
2024-02-25 07:30:08 [✔]  using existing VPC (vpc-0976a24a30b516395) and subnets (private:map[] public:map[ap-south-1a:{subnet-0024e0a8b4385349c ap-south-
1a 172.31.32.0/20 0 } ap-south-1b:{subnet-080927fada1a41643 ap-south-1b 172.31.0.0/20 0 }])
2024-02-25 07:30:08 [!]  custom VPC/subnets will be used; if resulting cluster doesn't function as expected, make sure to review the configuration of VPC
/subnets
2024-02-25 07:30:08 [ℹ]  nodegroup "my-workers" will use "" [AmazonLinux2/1.25]
2024-02-25 07:30:08 [ℹ]  using Kubernetes version 1.25
2024-02-25 07:30:08 [ℹ]  creating EKS cluster "my-cluster" in "ap-south-1" region with managed nodes
```

```
2024-02-25 07:45:17 [ℹ]  waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-workers"
2024-02-25 07:45:17 [ℹ]  waiting for the control plane to become ready
2024-02-25 07:45:18 [✔]  saved kubeconfig as "C:\\Users\\Administrator\\.kube\\config"
2024-02-25 07:45:18 [ℹ]  no tasks
2024-02-25 07:45:18 [✔]  all EKS cluster resources for "my-cluster" have been created
2024-02-25 07:45:18 [ℹ]  nodegroup "my-workers" has 2 node(s)
2024-02-25 07:45:18 [ℹ]  node "ip-172-31-39-101.ap-south-1.compute.internal" is ready
2024-02-25 07:45:18 [ℹ]  node "ip-172-31-8-252.ap-south-1.compute.internal" is ready
2024-02-25 07:45:18 [ℹ]  waiting for at least 1 node(s) to become ready in "my-workers"
2024-02-25 07:45:18 [ℹ]  nodegroup "my-workers" has 2 node(s)
2024-02-25 07:45:18 [ℹ]  node "ip-172-31-39-101.ap-south-1.compute.internal" is ready
2024-02-25 07:45:18 [ℹ]  node "ip-172-31-8-252.ap-south-1.compute.internal" is ready
2024-02-25 07:45:19 [ℹ]  kubectl command should work with "C:\\Users\\Administrator\\.kube\\config", try 'kubectl get nodes'
2024-02-25 07:45:19 [✔]  EKS cluster "my-cluster" in "ap-south-1" region is ready
PS C:\Users\Administrator>
```

Command to Delete an EKS Cluster

Command:

```
eksctl delete cluster --name my-cluster
```