Creating GKE Private cluster

1. Open Google Cloud Platform
2. Click on navigation menu --🡪 click Kubernetes Engine -🡪 click on cluster

Graphical user interface, text, application, email

Description automatically generated

1. It will open Kubernetes engine console --🡪 then click on create cluster

Graphical user interface, table

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1. Click on Configure button next to GKE standard option

Graphical user interface, text, application

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1. Enter the name of cluster

Graphical user interface, text, application, email

Description automatically generated

1. Choose the machine type as per your requirement under Nodes section

Graphical user interface, text, application, email

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1. Select “commerce-vpc-network” as network and node subnet type under networking section.

Graphical user interface, text, application, email

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1. Follow below step for creating private cluster as shown in screenshot
2. Choose Private cluster
3. Click on check box for “Enable control plane global access”

With control plane global access, you can access the control plane's private endpoint from any GCP region or on-premises environment no matter what the private cluster's region is.

1. Then enter control plane IP range

Control plane IP range is for the control plane VPC. The control plane range must not overlap with any subnet in your cluster's VPC. The control plane and your cluster use VPC peering to communicate privately. This setting is permanent

Graphical user interface, text, application

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OR

8) Follow below step for creating private cluster as shown in screenshot

1. Choose Private cluster
2. Then enter control plane IP range

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Graphical user interface, text, application, email

Description automatically generated

1. Click on check box for “Enable control plane authorized networks”,

Enable control plane authorized networks to block untrusted non-GCP source IPs from accessing the Kubernetes master through HTTPS.

Graphical user interface, text, application

Description automatically generated

OR

8) Follow below step for creating private cluster as shown in screenshot

1. Choose Private cluster
2. Uncheck “Access control plane using its external IP address”
3. Then enter control plane IP range and check I confirm my config

Control plane IP range is for the control plane VPC. The control plane range must not overlap with any subnet in your cluster's VPC. The control plane and your cluster use VPC peering to communicate privately. This setting is permanent

Graphical user interface, text, application, email

Description automatically generated

1. Click on check box for “Enable control plane authorized networks”,

Enable control plane authorized networks to block untrusted non-GCP source IPs from accessing the Kubernetes master through HTTPS.Graphical user interface, text, application, chat or text message, email

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1. Then finally click on CREATE

Graphical user interface, text, application

Description automatically generated

**Note: -** Control plane range must not overlap with any subnet in your cluster's VPC, below are some samples that can be used if you are getting any error for IP range

172.16.1.0/28

172.16.2.0/28

172.16.3.0/28

172.16.4.0/28

172.16.5.0/28

172.16.6.0/28

172.16.7.0/28

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172.16.99.0/28

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