

## 10. Enable access to the cluster with the GKE console

**NetApp Solutions** 

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# 10. Enable access to the cluster with the GKE console

After clusters are deployed and registered with Google Cloud, they must be logged into with the Google Cloud console to be managed and to receive additional cluster details. The official procedure to gain access to Anthos user clusters after they are deployed is detailed here.



The project and the specific user must be whitelisted to access on-premises clusters in the Google Cloud console and use Anthos on VMware services. If you are unable to see the clusters after they are deployed, you might need to open a support ticket with Google.

The non-whitelisted view looks like this:

The following figures provides a view of clusters.

To enable access to your user clusters using the GKE console, complete the following steps:

1. Create a node-reader.yaml file that allows you to access the cluster.

```
kind: clusterrole
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: node-reader
rules:
  - apiGroups: [""]
  resources: ["nodes"]
  verbs: ["get", "list", "watch"]
```

2. Apply this file to the cluster that you want to log into with the kubect1 command.

```
ubuntu@Anthos-Admin-Workstation:~$ kubectl apply -f node-reader.yaml --kubeconfig anthos-cluster01-kubeconfig clusterrole.rbac.authorization.k8s.io/node-reader created
```

3. Create a Kubernetes service account (KSA) that you can use to log in. Name this account after the user that uses this account to log into the cluster.

```
ubuntu@Anthos-Admin-Workstation:~$ kubectl create serviceaccount netappuser --kubeconfig anthos-cluster01-kubeconfig serviceaccount/netapp-user created
```

4. Create cluster role-binding resources to bind both the view and newly created node-reader roles to the newly created KSA.

```
ubuntu@Anthos-Admin-Workstation:~$ kubectl create clusterrolebinding netapp-user-view --clusterrole view --serviceaccount default:netapp-user --kubeconfig anthos-cluster01-kubeconfig clusterrolebinding.rbac.authorization.k8s.io/netapp-user-view created ubuntu@Anthos-Admin-Workstation:~$ kubectl create clusterrolebinding netapp-user-node-reader --clusterrole node-reader --serviceaccount default:netapp-user --kubeconfig anthos-cluster01-kubeconfig clusterrolebinding.rbac.authorization.k8s.io/netapp-user-node-reader created
```

5. If you need to extend permissions further, you can grant the KSA user a role with cluster admin permissions in a similar manner.

```
ubuntu@Anthos-Admin-Workstation:~$ kubectl create clusterrolebinding netapp-user-admin --clusterrole cluster-admin --serviceaccount default:netapp-user --kubeconfig anthos-cluster01-kubeconfig clusterrolebinding.rbac.authorization.k8s.io/netapp-user-admin created
```

6. With the KSA account created and assigned with correct permissions, you can create a bearer token to allow access with the GKE Console. To do so, set a system variable for the secret name, and pass that variable through a kubectl command to generate the token.

```
ubuntu@Anthos-Admin-Workstation:~$ SECRET NAME=$(kubectl get
serviceaccount netapp-user --kubeconfig anthos-cluster01-kubeconfig -o
jsonpath='{$.secrets[0].name}')
ubuntu@Anthos-Admin-Workstation:~$ kubectl get secret ${SECRET NAME}
--kubeconfig anthos-cluster01-kubeconfig -o jsonpath='{\$.data.token}' |
base64 -d
eyJhbGciOiJSUzI1NiIsImtpZCI6IiJ9.eyJpc3MiOiJrdWJlcm5ldGVzL3NlcnZpY2VhY2N
vdW50Iiwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWNjb3VudC9uYW1lc3BhY2UiOiJkZWZhdWx
01iwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWNjb3VudC9zZWNyZXQubmFtZS16Im5ldGFwcC1
1c2VyLXRva2VuLWJxd3piIiwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWNjb3VudC9zZXJ2aWN
lLWFjY291bnQubmFtZSI6Im5ldGFwcC11c2VyIiwia3ViZXJuZXRlcy5pby9zZXJ2aWNlYWN
jb3VudC9zZXJ2aWN1LWFjY291bnQudWlkIjoiNmIzZTFiZjQtMDE3NS0xMWVhLWEzMGUtNmF
iZmRlYjYwNDBmIiwic3ViIjoic3lzdGVtOnNlcnZpY2VhY2NvdW500mRlZmF1bHQ6bmV0YXB
wLXVzZXIifQ.YrHn4kYlb3qwxVKCLyo7p6J1f7mwwIqZqNw9eTvIkt4PfyR4IJHxQwawnJ4T
6RljIFcbVSQwvWI1yGuTJ98lADdcwtFXHoEfMcOa6SIn4OMVw1d5BGloaESn8150VCK3xES2
DHAmLexFBqhVBqckZ0E4fZDvn4EhYvtFVpKlRbSyaE-
DHD59P1bIqPdioiKREqbOddKdMn6XTVsuip4V4tVKhktcdRNRAuw6cFDY1fPol3BFHr2aNBI
e61FLkUqvQN-
9nMd63JGdHL4hfXu6PPDxc9By6LgOW0nyaH4 gexy4uIa61fNLKV2SKe4 gAN41ffOCKe4T
q8sa6zMo-8g
```

7. With this token, you can visit the Google Cloud Console and log in to the cluster by clicking the login button and pasting in the token.

### Log in to cluster

Choose the method you want to use for authentication to the cluster  Token	
Dxc9By6LgOW0nyaH4gexy4ula61fNLKV2SKe4_gAN41ffOCKe4Tq8sa6zMo-8g	
Basic authentication     Authenticate with Identity Provider configured for the cluster	

CLOSE LOGIN

1. After login is complete, you see a green check mark next to the cluster name, and information is displayed about the physical environment. Clicking the cluster name displays more verbose information.

Next: Install and Configure NetApp Trident Storage Provisioner.

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