LOGZILLA DOCUMENTATION

GKE Quickstart

Bring up LogZilla on Google Kubernetes Engine using the repository helper scripts and manifests, including gcloud authentication and cluster creation

Kubernetes Deployment Overview · Generated May 3, 2026 · logzilla.ai/docs/kubernetes-deployment/gke-quickstart

Purpose

This quickstart helps a technical operator new to Kubernetes bring up LogZilla on Google Kubernetes Engine (GKE) using the repository's existing helper scripts and manifests.

Prerequisites

- Google Cloud project with billing enabled.
- gcloud CLI and kubectl installed and on PATH.
- Authentication and project selection performed:

```
# Authenticate gcloud and select the project
gcloud auth login

# The scripts default to the project "logzilla-v7" and region "us-east1".
# If using a different project or region, edit the script noted below.
gcloud config set project logzilla-v7
```

Create a GKE cluster (scripted)

The repository provides `k8s/gcloud_scripts/create_cluster`. The quickstart uses the script as-is (project "logzilla-v7", region "us-east1").

```
# Optional: review or edit the script before running
sed -n '1,200p' k8s/gcloud_scripts/create_cluster

# Create a cluster named lz-cluster with 3 nodes (defaults in the script)
bash k8s/gcloud_scripts/create_cluster lz-cluster 3
```

Script defaults to be aware of (file: `k8s/gcloud_scripts/create_cluster`):

- Line 6: `--project "logzilla-v7"`
- Line 8: `--region "us-east1"`
- Lines 23-24: Default VPC and subnetwork values referencing the same project

If those do not match the target environment, edit the script accordingly before running.

Configure kubectl context

```
# Fetch cluster credentials for kubectl
gcloud container clusters get-credentials lz-cluster \
  --region us-east1 \
  --project logzilla-v7

# Verify connectivity
kubectl get nodes
```

Optional: create a dedicated namespace

```
kubectl create namespace logzilla
# Remember to add: -n logzilla to subsequent kubectl commands
```

Deploy backing services

Manifests are provided in `k8s/services/`.

```
kubectl apply -f k8s/services/postgres.yaml
kubectl apply -f k8s/services/redis.yaml
kubectl apply -f k8s/services/influxdb.yaml
# Optional dashboard
kubectl apply -f k8s/services/grafana.yaml
```

Deploy common config and LogZilla modules

Manifests are provided in `k8s/modules/`.

```
kubectl apply -f k8s/modules/common.yaml
kubectl apply -f k8s/modules/storage.yaml
kubectl apply -f k8s/modules/query.yaml
kubectl apply -f k8s/modules/api.yaml
kubectl apply -f k8s/modules/ingest.yaml
kubectl apply -f k8s/modules/front.yaml
```

Expose services (GKE example)

```
kubectl apply -f k8s/ingress/ingress-gke.yaml
```

This creates LoadBalancer Services for syslog (TCP/UDP), JSON, RFC5424, and HTTP ingest, and an Ingress routing the UI (`/`), static assets, API (`/api/`), WebSocket (`/ws/`), and `/incoming`.

Verify

```
kubectl get pods
kubectl get svc
kubectl describe ingress ingress-gke
```

Notes

- LogZilla images should use the `stable` tag for production. If a release pinning policy exists, use `vX.Y.Z`.
- Secrets in the docs use `stringData:` for readability. If using `data:`, base64-encode values first.

Cleanup

Scripts are provided and should be reviewed before running, as they are potentially destructive.

```
# Delete the cluster (uses region us-east1 and project logzilla-v7)
sed -n '1,200p' k8s/gcloud_scripts/delete_cluster
bash k8s/gcloud_scripts/delete_cluster lz-cluster

# Delete leftover disks in the project (uses region us-east1)
sed -n '1,200p' k8s/gcloud_scripts/delete_disks
bash k8s/gcloud_scripts/delete_disks
```