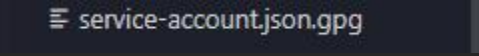


05.Github Actions Secret, Repo secret

- Server folder tree

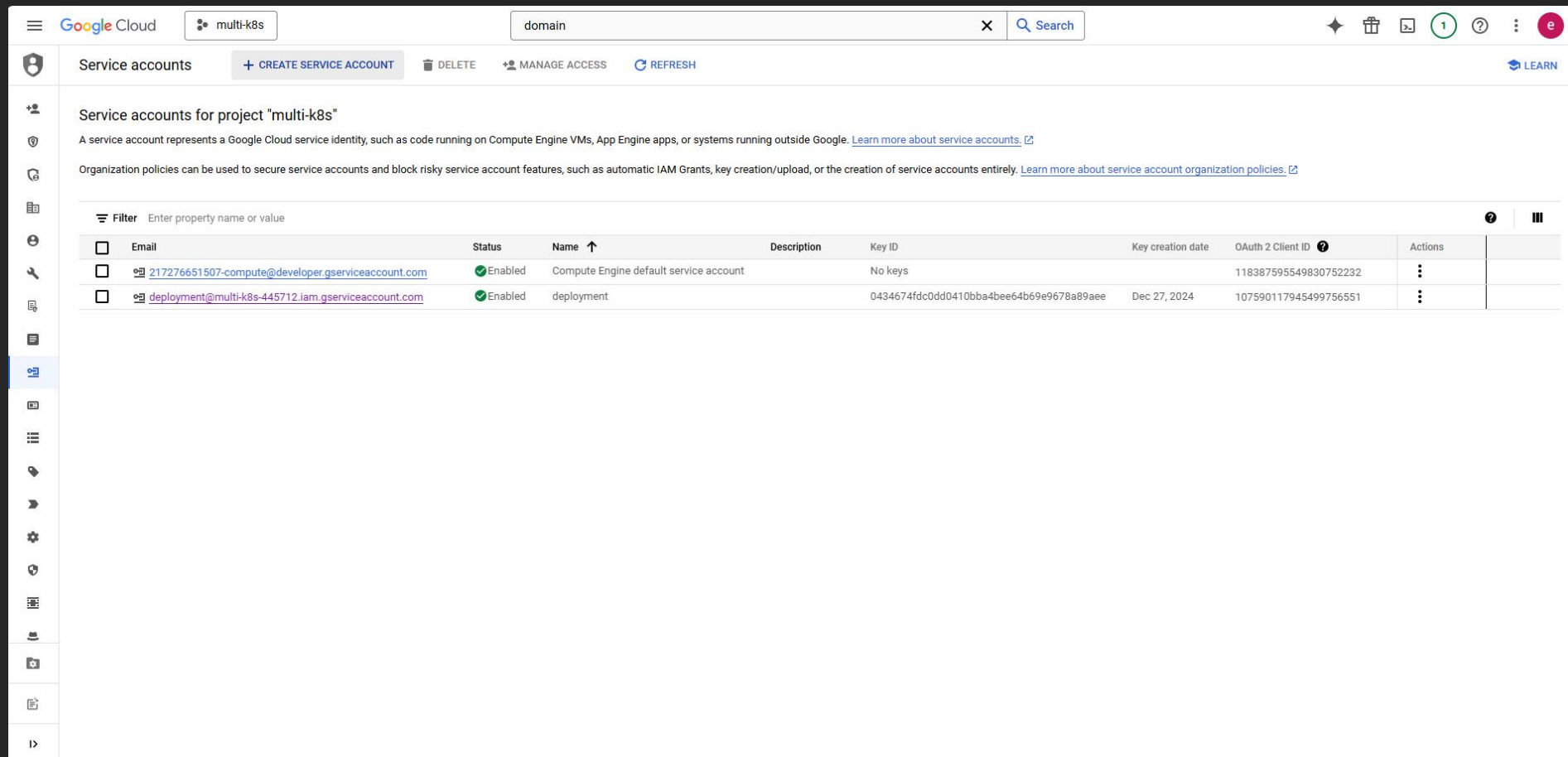
A terminal window snippet showing a file named `service-account.json.gpg` in a directory. The file name is highlighted in a dark blue box.

`service-account.json.gpg`

- Creating a Service Account on GCP.
- Encrypting on Git.
- Adding PASSPHRASE secret to the repo secret.
- Adding username and password secrets for Docker Hub login.

05.Github Actions Secret, Repo secret

- console.cloud.google.com/
- iam-admin/serviceaccount
- Create Service Account
- Select a Role / Kubernetes Engine Admin



The screenshot displays the Google Cloud IAM console interface. At the top, the navigation bar shows the Google Cloud logo, the project name 'multi-k8s', a search bar with the text 'domain', and various utility icons. Below the navigation bar, the 'Service accounts' section is active, featuring a '+ CREATE SERVICE ACCOUNT' button and links for 'DELETE', 'MANAGE ACCESS', and 'REFRESH'. The main content area is titled 'Service accounts for project "multi-k8s"' and includes explanatory text about service accounts and organization policies. A table lists the existing service accounts, with columns for Email, Status, Name, Description, Key ID, Key creation date, OAuth 2 Client ID, and Actions. Two service accounts are listed: '217276651507-compute@developer.gserviceaccount.com' and 'deployment@multi-k8s-445712.iam.gserviceaccount.com'. The left sidebar contains a vertical menu of icons for navigating through the Google Cloud ecosystem.

Email	Status	Name	Description	Key ID	Key creation date	OAuth 2 Client ID	Actions
217276651507-compute@developer.gserviceaccount.com	Enabled	Compute Engine default service account		No keys		118387595549830752232	⋮
deployment@multi-k8s-445712.iam.gserviceaccount.com	Enabled	deployment		0434674fdc0dd0410bba4bee64b69e9678a89aee	Dec 27, 2024	107590117945499756551	⋮

05.Github Actions Secret, Repo secret

- Manage keys/Create new key/JSON

Google Cloud multi-k8s domain Search

Service accounts + CREATE SERVICE ACCOUNT DELETE MANAGE ACCESS REFRESH LEARN

Service accounts for project "multi-k8s"

A service account represents a Google Cloud service identity, such as code running on Compute Engine VMs, App Engine apps, or systems running outside Google. [Learn more about service accounts.](#)

Organization policies can be used to secure service accounts and block risky service account features, such as automatic IAM Grants, key creation/upload, or the creation of service accounts entirely. [Learn more about service account organization policies.](#)

Filter Enter property name or value

<input type="checkbox"/>	Email	Status	Name ↑	Description	Key ID	Key creation date	OAuth 2 Client ID ?	Actions
<input type="checkbox"/>	217276651507-compute@developer.gserviceaccount.com	Enabled	Compute Engine default service account		No keys		118387595549830752232	⋮
<input type="checkbox"/>	deployment@multi-k8s-445712.iam.gserviceaccount.com	Enabled	deployment		0434674fdc0dd0410bba4bee64b69e9678a89aee	Dec 27, 2024	107590117945499756551	⋮

- Manage details
- Manage permissions
- Manage keys
- View metrics
- View logs
- Disable
- Delete

05.Github Actions Secret, Repo secret

- Manage keys/Create new key/JSON

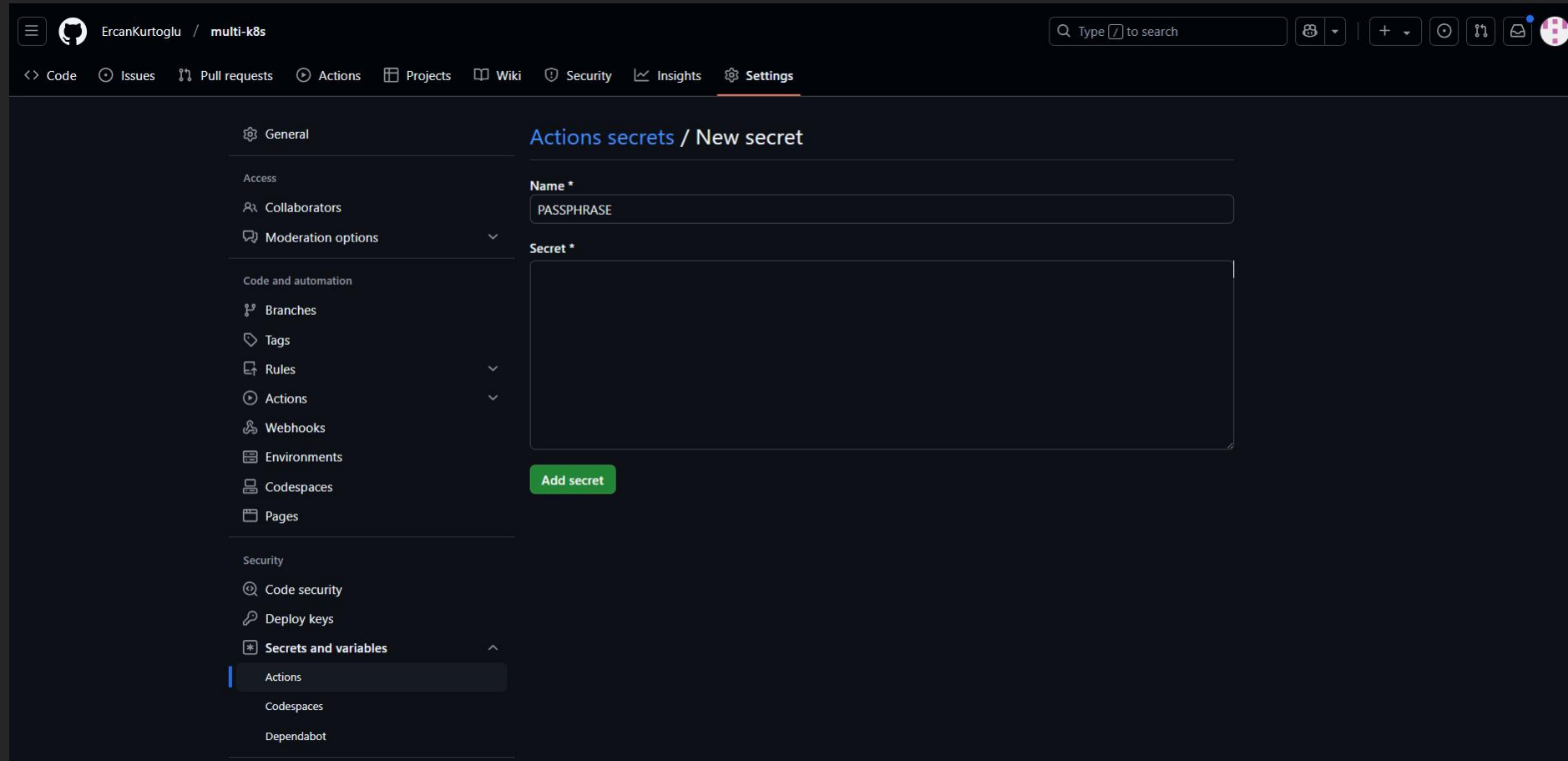
```
gpg --symetric --cipher-algo AES256 service-account.json
```

```
≡ service-account.json.gpg
```

- The downloaded JSON file is encrypted using the gpg command.
- The gpg command will prompt for a Passphrase. This passphrase should also be added to the GitHub repo secrets section.
- The encrypted file will have a '.gpg' extension.

05.Github Actions Secret, Repo secret

- <https://github.com/ErcanKurtoglu/multi-k8s/settings/secrets/actions>



05.Github Actions Secret, Repo secret - all secrets

The screenshot shows the GitHub repository settings page for 'Actions secrets and variables'. The left sidebar contains navigation links for General, Access, Collaborators, Moderation options, Code and automation (Branches, Tags, Rules, Actions, Webhooks, Environments, Codespaces, Pages), Security (Code security, Deploy keys, Secrets and variables, Actions, Codespaces, Dependabot), and Integrations (GitHub Apps, Email notifications). The 'Secrets and variables' link is highlighted. The main content area is titled 'Actions secrets and variables' and includes a description of secrets and variables, a warning about collaborator access, and tabs for 'Secrets' and 'Variables'. Below the tabs, there is a section for 'Environment secrets' which is currently empty, and a 'Repository secrets' section containing a table of existing secrets.

Actions secrets and variables

Secrets and variables allow you to manage reusable configuration data. Secrets are **encrypted** and are used for sensitive data. [Learn more about encrypted secrets](#). Variables are shown as plain text and are used for **non-sensitive** data. [Learn more about variables](#).

Anyone with collaborator access to this repository can use these secrets and variables for actions. They are not passed to workflows that are triggered by a pull request from a fork.

Environment secrets

This environment has no secrets.

[Manage environment secrets](#)

Repository secrets

[New repository secret](#)

Name	Last updated		
DOCKER_PASSWORD	last week	Edit	Delete
DOCKER_USERNAME	last week	Edit	Delete
PASSPHRASE	last week	Edit	Delete

05.Github Actions Secret, Repo secret

- Decryption json file

```
deploy:
  name: Deploy to GKE
  runs-on: ubuntu-latest
  needs: build

  steps:
    - name: Checkout code
      uses: actions/checkout@v4

    - name: Decrypt service account key
      run: gpg --quiet --batch --yes --decrypt --passphrase="${{ secrets.PASSPHRASE }}" --output service-account.json service-account.json.gpg

    - name: Authenticate to Google Cloud
      run: gcloud auth activate-service-account --key-file=service-account.json
```

05. Github Actions Secret, Repo secret

- CI/CD with succeed result

The screenshot displays the GitHub Actions interface for a workflow named 'multi-k8s' by user 'ErcanKurtoglu'. The workflow is a CI/CD pipeline that has successfully completed job #12, titled 'switched to deploy job #12'. The interface shows a summary of the run, including the jobs 'Build and Test' and 'Deploy to GKE', both of which passed. The total duration of the run was 3 minutes and 7 seconds. The workflow file, 'gke-deployment.yml', is shown as being triggered on a push. The 'Annotations' section lists three warnings: two about the upcoming use of Ubuntu 24.04 by the latest pipelines and one about missing authentication for gcloud.

CI/CD Pipeline

switched to deploy job #12

Re-run all jobs

Summary

Jobs

- Build and Test
- Deploy to GKE

Run details

- Usage
- Workflow file

Triggered via push 2 weeks ago

Status: Success

Total duration: 3m 7s

Artifacts: -

gke-deployment.yml

on: push

Build and Test (55s) → Deploy to GKE (1m 57s)

Annotations

3 warnings

- Build and Test: ubuntu-latest pipelines will use ubuntu-24.04 soon. For more details, see <https://github.com/actions/runner-images/issues/10636>
- Deploy to GKE: ubuntu-latest pipelines will use ubuntu-24.04 soon. For more details, see <https://github.com/actions/runner-images/issues/10636>
- Deploy to GKE: No authentication found for gcloud, authenticate with 'google-github-actions/auth'.