

Etap 1a - sprawozdanie

6.

Jakie sposoby odwoływania się do modułów Terraform są wykorzystane w projekcie?

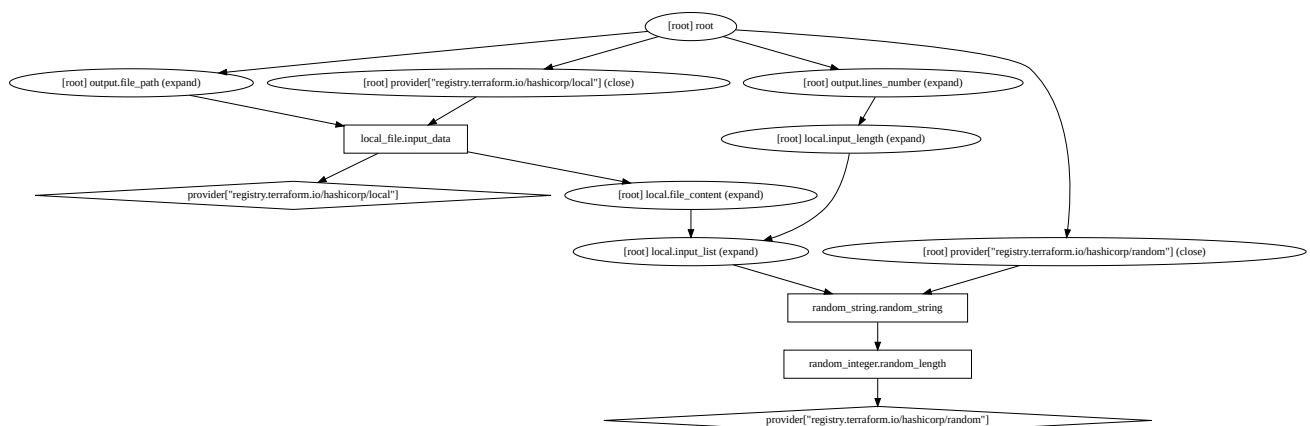
Trzy odwołania do modułów lokalnych (umieszczonych w innych folderach) oraz jedno odwołanie do modułu zewnętrznego (umieszczonego na innym repozytorium git)

6.a

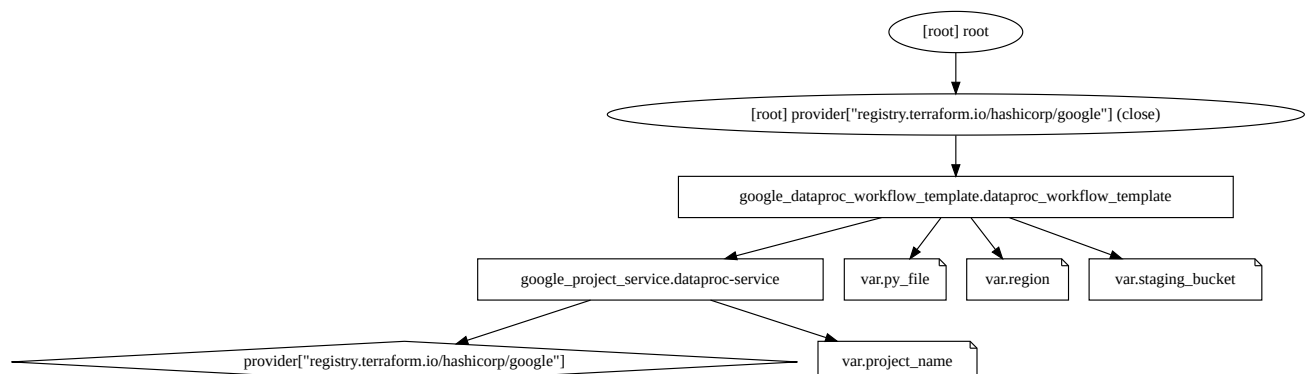
- data-generator
- dataproc-pyspark-job
- gke
- k8s-spark-operator <- zewnętrzny

6.b:

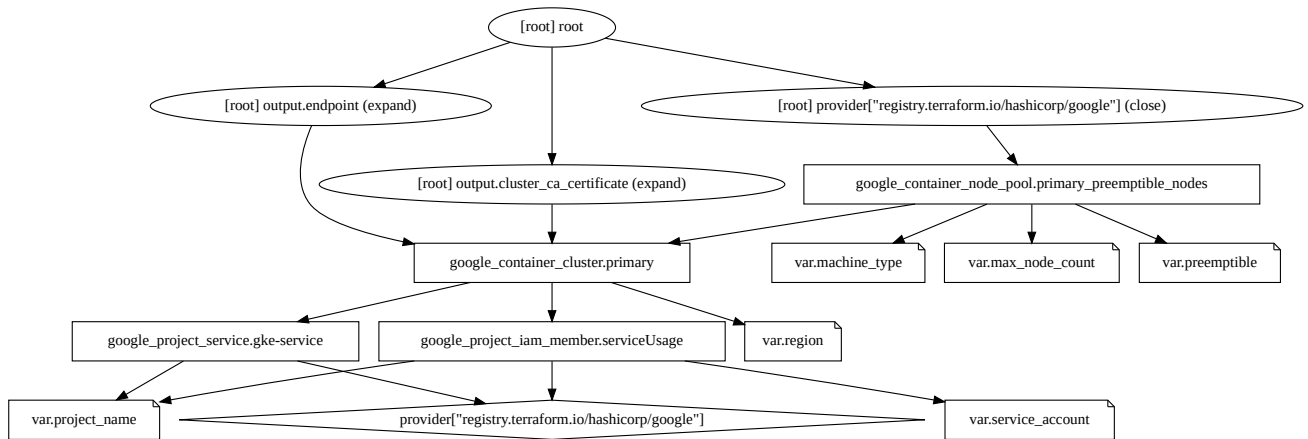
- data-generator



- dataproc-pyspark-job



- gke



6.c

- data-generator - losuje string o losowej długości w przedziale [100, 5000], i zapisuje go jako `data/input.csv`.
- dataproc-pyspark-job - pozwala naszemu projektowi na korzystanie z dwóch serwisów `API("dataproc.googleapis.com", "workflowexecutions.googleapis.com")` oraz tworzy `dataproc_workflow_template`, czyli konfigurację szablonu do wykonywania jobów (np. PySparka) w postaci DAG.
- gke - pozwala naszemu projektowi na korzystanie z serwisu `API("container.googleapis.com")`, dodaje nową rolę do naszego account `service("serviceusage.serviceUsageAdmin")` oraz tworzy klaster wraz z węzłami, z których będzie się składał.
- k8s-spark-operator - tworzy `helm_release`, czyli: klaster Kubernetes a, który wykonuje na sobie paczkę `helm` o nazwie `chart`. W naszym przypadku wykorzystywany do wykonywania Sparka.

7.a Budżet z poziomu konsoli.

TBD billing budget

Name *

TBD billing budget

Scope

^

A budget enables you to track your actual spend against your planned spend.

Time range

Monthly

The month starts on the first of the month and reset at the beginning of each month.

A budget can be scoped to focus on a specific set of resources.

Projects

All projects (1)

Services

All services (1959)

Labels ?

∨

Select the key and value of the label you want to filter.

Credits
Selected credits are applied to the total cost. Budget tracks the total cost minus any applicable selected credits

☐ Discounts ?

∨

☐ Promotions and others ?

∨

Amount

^

Amount



Set a monthly budget amount

Budget type

Specified amount



A fixed amount that your spend will be compared against.

Target amount *

50

\$

Actions



Set alert threshold rules

Send email alert notifications after the actual or forecasted spend exceeds a percent of the budget or a specified amount. [Learn more.](#)

Percent of budget...

50

%

Amount 1 *

25

\$

Trigger on 1

Actual



Percent of budget...

80

%

Amount 2 *

40

\$

Trigger on 2

Actual



Percent of budget...

100

%

Amount 3 *

50

\$

Trigger on 3

Actual



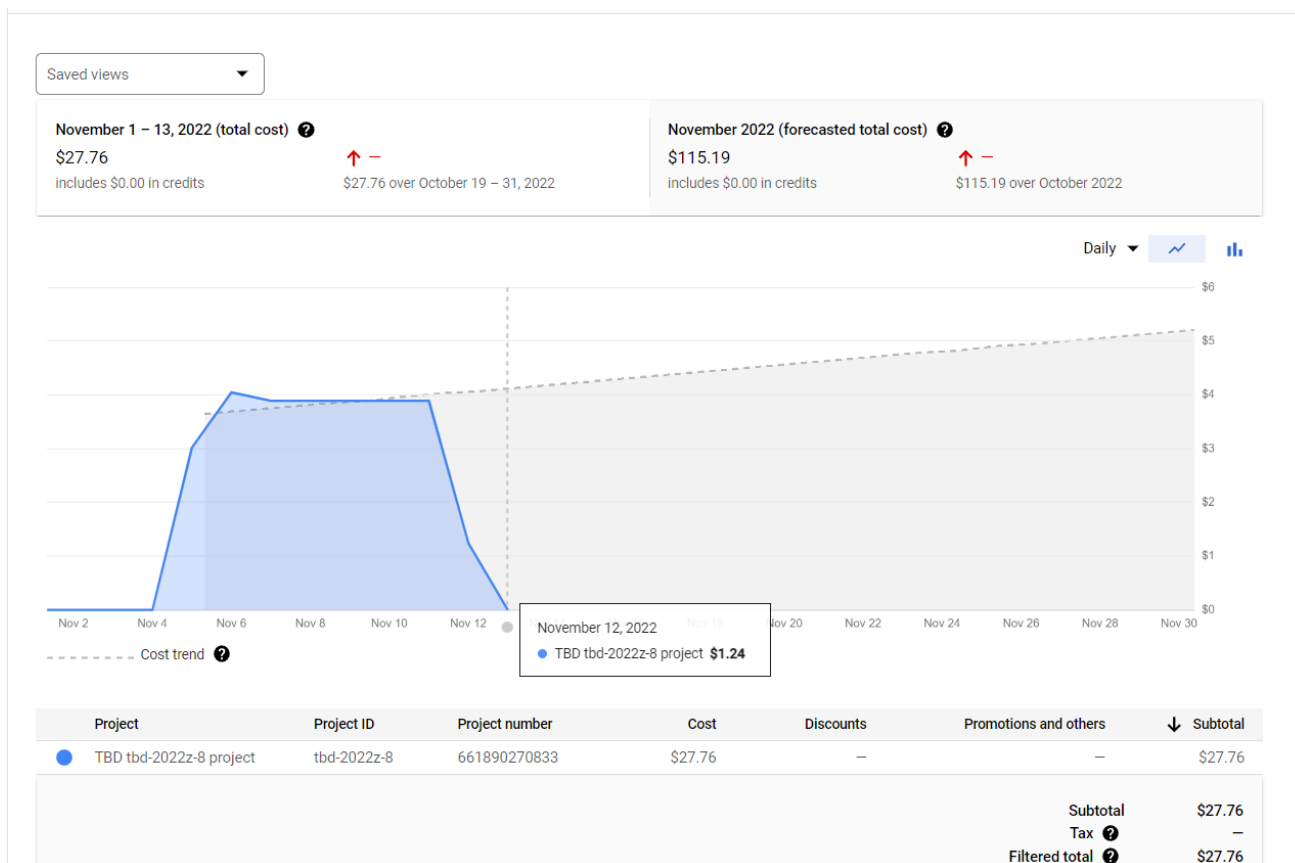
[+ ADD THRESHOLD](#)

Manage notifications

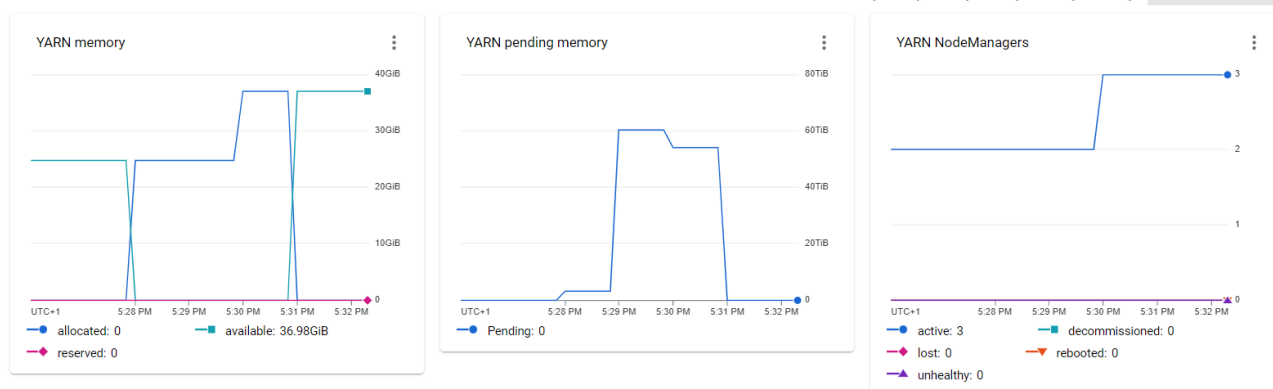
Send email alert notifications to billing admins and users of this billing account.

☒ Email alerts to billing admins and users

7.b Wykorzystanie budżetu po kilku dniach.



8. Screen z konsoli GCP.



**** Potwierdzenie odpalenie jobów W celu potwierdzenia odpalenia jobów zadanych w poleceniu załączamy zrzuty z logów GCP:

- GKE

12.11.22			
2:50 PM	🔧	Completed: Delete cluster	tbd-2022z-8-cluster was deleted
2:45 PM	🔧	Delete cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted tbd-2022z-8-cluster
2:45 PM	🔧	Completed: Delete node pool	tbd-2022z-8-lab-pool was deleted
2:42 PM	🔧	Delete node pool	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted tbd-2022z-8-lab-pool
7:37 AM	🔧	Completed: google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster	google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster
11.11.22			
5:23 AM	🔧	Completed: google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster	google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster
4:26 AM	🔧	Completed: google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster	google.container.internal.ClusterManagerInternal.UpdateCluster was executed on tbd-2022z-8-cluster
10.11.22			
1:51 AM	🔧	Completed: google.container.internal.ClusterManagerInternal.PatchCluster was executed on tbd-2022z-8-cluster	google.container.internal.ClusterManagerInternal.PatchCluster was executed on tbd-2022z-8-cluster
05.11.22			
1:51 PM	🔧	Completed: Create node pool	tbd-2022z-8-lab-pool was created
1:50 PM	🔧	Create node pool	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com created tbd-2022z-8-lab-pool
1:50 PM	🔧	Completed: Delete node pool	default-pool was deleted
1:48 PM	🔧	Delete node pool	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted default-pool
1:47 PM	🔧	Completed: Create cluster	tbd-2022z-8-cluster was created
1:40 PM	🔧	Create cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com created tbd-2022z-8-cluster
No older events found.			

- dataproc - tutaj Failed:Cancel job wynika z Cannot cancel jobId '66a89ae8-7439-46a8-84f5-0910a6cef43d' in projectId 'tbd-2022z-8' in state: 'DONE'; cancellable states: '[PENDING, RUNNING]' - czyli wszystko przebiegło poprawnie

12.11.22			
5:36 PM	🔧	Completed: Delete cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted dataproc-cluster-point-8
5:35 PM	🔧	Delete cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted dataproc-cluster-point-8
5:35 PM	🔧	Delete job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted 744947c0-05ff-46be-9ace-3990dd1cfd68
5:35 PM	❌	Failed: Cancel job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com failed to cancel 744947c0-05ff-46be-9ace-3990dd1cfd68
5:32 PM	🔧	Completed: Update cluster	dataproc-cluster-point-8 updated
5:32 PM	🔧	Update cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com updated dataproc-cluster-point-8
5:29 PM	🔧	Completed: Update cluster	dataproc-cluster-point-8 updated
5:29 PM	🔧	Update cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com updated dataproc-cluster-point-8
5:27 PM	🔧	Submit job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com submitted 744947c0-05ff-46be-9ace-3990dd1cfd68
5:27 PM	🔧	Delete job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com deleted 66a89ae8-7439-46a8-84f5-0910a6cef43d
5:27 PM	❌	Failed: Cancel job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com failed to cancel 66a89ae8-7439-46a8-84f5-0910a6cef43d
5:22 PM	🔧	Submit job	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com submitted 66a89ae8-7439-46a8-84f5-0910a6cef43d
5:20 PM	🔧	Completed: Create cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com created dataproc-cluster-point-8
5:19 PM	🔧	Create cluster	tbd-2022z-8-lab@tbd-2022z-8.iam.gserviceaccount.com created dataproc-cluster-point-8
05.11.22			
4:21 PM	🔧	Completed: Delete cluster	tbd-2022z-8-cluster-t2lmqnm3ilaee deleted
4:20 PM	🔧	Delete cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com deleted tbd-2022z-8-cluster-t2lmqnm3ilaee
4:19 PM	🔧	Submit job	service-661890270833@dataproc-accounts.iam.gserviceaccount.com submitted tbd-2022z-8-job-t2lmqnm3ilaee
4:19 PM	🔧	Completed: Create cluster	tbd-2022z-8-cluster-t2lmqnm3ilaee created
4:16 PM	🔧	Create cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com created tbd-2022z-8-cluster-t2lmqnm3ilaee
2:09 PM	🔧	Completed: Delete cluster	tbd-2022z-8-cluster-2chjq7mcwbqu deleted
2:08 PM	🔧	Delete cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com deleted tbd-2022z-8-cluster-2chjq7mcwbqu
2:07 PM	🔧	Submit job	service-661890270833@dataproc-accounts.iam.gserviceaccount.com submitted tbd-2022z-8-job-2chjq7mcwbqu
2:07 PM	🔧	Completed: Create cluster	tbd-2022z-8-cluster-2chjq7mcwbqu created
2:03 PM	🔧	Create cluster	service-661890270833@dataproc-accounts.iam.gserviceaccount.com created tbd-2022z-8-cluster-2chjq7mcwbqu
No older events found.			