zhangqufei@Mac terraform % kubectl get nodes

NAME STATUS ROLES AGE VERSION

gke-search-cluster-primary-node-pool-08c32aea-2kx9 Ready <none> 3m11s v1.31.6-gke.1020000

gke-search-cluster-primary-node-pool-3c0bb97f-gdj5 Ready <none> 3m22s v1.31.6-gke.1020000

gke-search-cluster-primary-node-pool-641ea23d-37rd Ready <none> 3m7s v1.31.6-gke.1020000

zhangqufei@Mac terraform % kubectl get pods

No resources found in default namespace.

zhangqufei@Mac terraform % terraform apply -auto-approve

google\_container\_cluster.primary: Refreshing state... [id=projects/finalproject-455103/locations/us-central1/clusters/search-cluster]

google\_container\_node\_pool.primary\_nodes: Refreshing state... [id=projects/finalproject-455103/locations/us-central1/clusters/search-cluster/nodePools/primary-node-pool]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the

following symbols:

+ create

Terraform will perform the following actions:

# helm\_release.kafka will be created

+ resource "helm\_release" "kafka" {

+ atomic = false

+ chart = "kafka"

+ cleanup\_on\_fail = false

+ create\_namespace = false

+ dependency\_update = false

+ disable\_crd\_hooks = false

+ disable\_openapi\_validation = false

+ disable\_webhooks = false

+ force\_update = false

+ id = (known after apply)

+ lint = false

+ manifest = (known after apply)

+ max\_history = 0

+ metadata = (known after apply)

+ name = "kafka"

+ namespace = "default"

+ pass\_credentials = false

+ recreate\_pods = false

+ render\_subchart\_notes = true

+ replace = false

+ repository = "https://charts.bitnami.com/bitnami"

+ reset\_values = false

+ reuse\_values = false

+ skip\_crds = false

+ status = "deployed"

+ timeout = 300

+ verify = false

+ version = "22.1.2"

+ wait = true

+ wait\_for\_jobs = false

+ set {

+ name = "auth.enabled"

+ value = "false"

}

+ set {

+ name = "replicaCount"

+ value = "2"

}

+ set {

+ name = "zookeeper.replicaCount"

+ value = "1"

}

}

Plan: 1 to add, 0 to change, 0 to destroy.

helm\_release.kafka: Creating...

helm\_release.kafka: Still creating... [10s elapsed]

helm\_release.kafka: Still creating... [20s elapsed]

helm\_release.kafka: Still creating... [30s elapsed]

helm\_release.kafka: Still creating... [40s elapsed]

helm\_release.kafka: Still creating... [50s elapsed]

helm\_release.kafka: Creation complete after 51s [id=kafka]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Outputs:

kubernetes\_cluster\_name = "search-cluster"

kubernetes\_cluster\_region = "us-central1"

zhangqufei@Mac terraform % kubectl get pods

NAME READY STATUS RESTARTS AGE

kafka-0 1/1 Running 0 68s

kafka-1 1/1 Running 0 68s

Testing kafka:  
  
zhangqufei@Mac terraform % kubectl run kafka-client --restart='Never' --image docker.io/bitnami/kafka:latest -it -- bash

If you don't see a command prompt, try pressing enter.

I have no name!@kafka-client:/$

I have no name!@kafka-client:/$

I have no name!@kafka-client:/$

I have no name!@kafka-client:/$ export KAFKA\_BROKER\_LIST=kafka:9092

export KAFKA\_ZOOKEEPER=localhost:2181

I have no name!@kafka-client:/$ kafka-topics.sh --create --topic test-topic --bootstrap-server $KAFKA\_BROKER\_LIST --replication-factor 1 --partitions 1

Picked up JAVA\_TOOL\_OPTIONS:

Created topic test-topic.

I have no name!@kafka-client:/$ kafka-console-producer.sh --broker-list $KAFKA\_BROKER\_LIST --topic test-topic

Picked up JAVA\_TOOL\_OPTIONS:

broker-list is not a recognized option

Option Description

------ -----------

--batch-size <Integer: size> Number of messages to send in a single

batch if they are not being sent

synchronously. please note that this

option will be replaced if max-

partition-memory-bytes is also set

(default: 16384)

--bootstrap-server <String: server to REQUIRED: The server(s) to connect to.

connect to> The broker list string in the form

HOST1:PORT1,HOST2:PORT2.

--compression-codec [String: The compression codec: either 'none',

compression-codec] 'gzip', 'snappy', 'lz4', or 'zstd'.

If specified without value, then it

defaults to 'gzip'

--help Print usage information.

--line-reader <String: reader\_class> The class name of the class to use for

reading lines from standard in. By

default each line is read as a

separate message. (default: org.

apache.kafka.tools.LineMessageReader)

--max-block-ms <Long: max block on The max time that the producer will

send> block for during a send request.

(default: 60000)

--max-memory-bytes <Long: total memory The total memory used by the producer

in bytes> to buffer records waiting to be sent

to the server. This is the option to

control `buffer.memory` in producer

configs. (default: 33554432)

--max-partition-memory-bytes <Integer: The buffer size allocated for a

memory in bytes per partition> partition. When records are received

which are smaller than this size the

producer will attempt to

optimistically group them together

until this size is reached. This is

the option to control `batch.size`

in producer configs. (default: 16384)

--message-send-max-retries <Integer> Brokers can fail receiving the message

for multiple reasons, and being

unavailable transiently is just one

of them. This property specifies the

number of retries before the

producer give up and drop this

message. This is the option to

control `retries` in producer

configs. (default: 3)

--metadata-expiry-ms <Long: metadata The period of time in milliseconds

expiration interval> after which we force a refresh of

metadata even if we haven't seen any

leadership changes. This is the

option to control `metadata.max.age.

ms` in producer configs. (default:

300000)

--producer-property <String: A mechanism to pass user-defined

producer\_prop> properties in the form key=value to

the producer.

--producer.config <String: config file> Producer config properties file. Note

that [producer-property] takes

precedence over this config.

--property <String: prop> A mechanism to pass user-defined

properties in the form key=value to

the message reader. This allows

custom configuration for a user-

defined message reader.

Default properties include:

parse.key=false

parse.headers=false

ignore.error=false

key.separator=\t

headers.delimiter=\t

headers.separator=,

headers.key.separator=:

null.marker= When set, any fields

(key, value and headers) equal to

this will be replaced by null

Default parsing pattern when:

parse.headers=true and parse.key=true:

"h1:v1,h2:v2...\tkey\tvalue"

parse.key=true:

"key\tvalue"

parse.headers=true:

"h1:v1,h2:v2...\tvalue"

--reader-config <String: config file> Config properties file for the message

reader. Note that [property] takes

precedence over this config.

--request-required-acks <String: The required `acks` of the producer

request required acks> requests (default: -1)

--request-timeout-ms <Integer: request The ack timeout of the producer

timeout ms> requests. Value must be non-negative

and non-zero. (default: 1500)

--retry-backoff-ms <Long> Before each retry, the producer

refreshes the metadata of relevant

topics. Since leader election takes

a bit of time, this property

specifies the amount of time that

the producer waits before refreshing

the metadata. This is the option to

control `retry.backoff.ms` in

producer configs. (default: 100)

--socket-buffer-size <Integer: size> The size of the tcp RECV size. This is

the option to control `send.buffer.

bytes` in producer configs.

(default: 102400)

--sync If set message send requests to the

brokers are synchronously, one at a

time as they arrive.

--timeout <Long: timeout\_ms> If set and the producer is running in

asynchronous mode, this gives the

maximum amount of time a message

will queue awaiting sufficient batch

size. The value is given in ms. This

is the option to control `linger.ms`

in producer configs. (default: 1000)

--topic <String: topic> REQUIRED: The topic name to produce

messages to.

--version Display Kafka version.

I have no name!@kafka-client:/$ kafka-console-consumer.sh --bootstrap-server $KAFKA\_BROKER\_LIST --topic test-topic --from-beginning

Picked up JAVA\_TOOL\_OPTIONS:

^CProcessed a total of 0 messages

I have no name!@kafka-client:/$ kafka-console-producer.sh --bootstrap-server $KAFKA\_BROKER\_LIST --topic test-topic

Picked up JAVA\_TOOL\_OPTIONS:

>hello world

this is kafka

test123

>>>

>ds

I have no name!@kafka-client:/$ kafka-console-consumer.sh --bootstrap-server $KAFKA\_BROKER\_LIST --topic test-topic --from-beginning

Picked up JAVA\_TOOL\_OPTIONS:

hello world

this is kafka

test123

ds

A computer screen with white text

Description automatically generated