

Practica:

PARTE 1: Captura de pantalla de la consola SSH del cluster Hadoop una vez finalizada la configuración y carga.

Google Cloud

bd14-project

SSH en el navegador

SUBIR ARCHIVO

DESCARGAR ARCHIVO

Detalles del bucket

bucket-para-elastic-5

Ubicación: europe-west2 (Londres)

Clase de almacenamiento: Standard

OBJETOS

CONFIGURACIÓN

PERMISOS

Depósitos > bucket-para-elastic-5

CREAR CARPETA

SUBIR

TRAN

Filtrar solo por prefijo de nombre

Nombre

commons-httpclient-3.1.jar

elasticsearch-hadoop-8.14.1.jar

1 update can be applied immediately.

To see these additional updates run: apt list --upgradable

7 additional security updates can be applied with ESM Apps.

Learn more about enabling ESM Apps service at https://ubuntu.com/esm

New release '22.04.5 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

Last login: Fri Nov 1 17:13:59 2024 from 35.235.242.16

paucimi@hadoop-1-m:~\$ gsutil ls gs://bucket-para-elastic-5/jars/elastic/

CommandException: One or more URIs matched no objects.

paucimi@hadoop-1-m:~\$ gsutil ls gs://bucket-para-elastic-5

gs://bucket-para-elastic-5/commons-httpclient-3.1.jar

gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar

paucimi@hadoop-1-m:~\$ gsutil cp gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar .

AccessDeniedException: 403 856302127781-compute@developer.gserviceaccount.com does not have storage.ob

jects.list access to the Google Cloud Storage bucket. Permission 'storage.objects.list' denied on reso

urce (or it may not exist).

paucimi@hadoop-1-m:~\$ gsutil cp gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar .

Copying gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar...

/ [1 files] [2.1 MiB/ 2.1 MiB]

Operation completed over 1 objects/2.1 MiB.

paucimi@hadoop-1-m:~\$ ^C

paucimi@hadoop-1-m:~\$ gsutil cp gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar .

Copying gs://bucket-para-elastic-5/elasticsearch-hadoop-8.14.1.jar...

/ [1 files] [2.1 MiB/ 2.1 MiB]

Operation completed over 1 objects/2.1 MiB.

paucimi@hadoop-1-m:~\$ gsutil cp gs://bucket-para-elastic-5/commons-httpclient-3.1.jar .

Copying gs://bucket-para-elastic-5/commons-httpclient-3.1.jar...

/ [1 files] [297.8 KiB/297.8 KiB]

Operation completed over 1 objects/297.8 KiB.

paucimi@hadoop-1-m:~\$

PARTE 2: Configuración server Elasticsearch

Instancias de VM

CREAR INSTANCIA

IMPORTAR VM

INSTANCIAS

OBSERVABILIDAD

PROGRAMAS DE LAS INSTANCIAS

Instancias de VM

Filtro

Ingresar el nombre o el valor de la propiedad

Estado

Nombre

Zona

Recomendación

elastic-5

hadoop-1-m

hadoop-1-w-0

hadoop-1-w-1

Acciones relacionadas

Explorar Backup and DR

Consulta el informe de facturación

Configura reglas de firewall

Administración de parche

SSH en el navegador

SUBIR ARCHIVO

DESCARGAR ARCHIVO

#

Enable security features

xpack.security.enabled: false

xpack.security.enrollment.enabled: true

Enable encryption for HTTP API client connections, such as Kibana, Logstash, and Agents

xpack.security.http.ssl:

enabled: false

keystore.path: certs/http.p12

Enable encryption and mutual authentication between cluster nodes

xpack.security.transport.ssl:

enabled: true

verification_mode: certificate

keystore.path: certs/transport.p12

truststore.path: certs/transport.p12

Create a new cluster with the current node only

Additional nodes can still join the cluster later

cluster.initial_master_nodes: ["elastic-5"]

Allow HTTP API connections from anywhere

Connections are encrypted and require user authentication

http.host: 0.0.0.0

Allow other nodes to join the cluster from anywhere

Connections are encrypted and mutually authenticated

#transport.host: 0.0.0.0

----- END SECURITY AUTO CONFIGURATION -----

paucimi@elastic-5:~\$ curl -I http://34.105.228.39:9200

HTTP/1.1 200 OK

X-elastic-product: Elasticsearch

content-type: application/json

content-length: 534

paucimi@elastic-5:~\$ sudo cat /etc/elasticsearch/elasticsearch.yml

===== Elasticsearch Configuration =====

#

PARTE 3 - Configuración en Cluster Hadoop de Conexión con ES

```
Last login: Fri Nov 1 18:00:29 2024 from 35.235.242.17
paucimi@hadoop-1-m:~$ sudo cp elasticsearch-hadoop-8.14.1.jar /usr/lib/hive/lib/
paucimi@hadoop-1-m:~$ sudo cp commons-httpclient-3.1.jar /usr/lib/hive/lib/
paucimi@hadoop-1-m:~$ sudo sed -i '$d' /etc/hive/conf.dist/hive-site.xml
paucimi@hadoop-1-m:~$ sudo sed -i '$a \ <property>\n <name>es.nodes</name>\n <value>TU_IP_DE_ELASTICSEARCH</value>\n </property>\n' /etc/hiv
e/conf.dist/hive-site.xml
paucimi@hadoop-1-m:~$ sudo sed -i '$a \ <property>\n <name>es.nodes</name>\n <value>34.105.228.39</value>\n </property>\n' /etc/hive/conf.di
st/hive-site.xml
paucimi@hadoop-1-m:~$ sudo sed -i '$a \ <property>\n <name>es.port</name>\n <value>9200</value>\n </property>\n' /etc/hive/conf.dist/hive-si
te.xml
paucimi@hadoop-1-m:~$ sudo sed -i '$a \ <property>\n <name>es.nodes.wan.only</name>\n <value>true</value>\n </property>\n' /etc/hive/conf.di
st/hive-site.xml
paucimi@hadoop-1-m:~$ sudo sed -i '$a \ <property>\n <name>hive.aux.jars.path</name>\n <value>/usr/lib/hive/lib/elasticsearch-hadoop-8.14.1.j
ar,/usr/lib/hive/lib/commons-httpclient-3.1.jar</value>\n </property>\n</configuration>' /etc/hive/conf.dist/hive-site.xml
paucimi@hadoop-1-m:~$ sudo cp elasticsearch-hadoop-8.14.1.jar /usr/lib/hive/lib/
paucimi@hadoop-1-m:~$ sudo cp commons-httpclient-3.1.jar /usr/lib/hive/lib/
paucimi@hadoop-1-m:~$ sudo service hive-server2 restart
paucimi@hadoop-1-m:~$
```

PARTE 4 - A conectar datos

```
paucimi@hadoop-1-m:~$ curl -X GET "http://34.105.228.39:9200/alumnos/_search?pretty"
{
  "took" : 19,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {
    "total" : {
      "value" : 6,
      "relation" : "eq"
    },
    "max_score" : 1.0,
    "hits" : [
      {
        "_index" : "alumnos",
        "_id" : "3",
        "_score" : 1.0,
        "_source" : {
          "id" : 3,
          "name" : "Carlos",
          "last_name" : "González"
        }
      },
      {
        "_index" : "alumnos",
        "_id" : "4",
        "_score" : 1.0,
        "_source" : {
          "id" : 4,
          "name" : "María",
          "last_name" : "López"
        }
      },
      {
        "_index" : "alumnos",
        "_id" : "5",
        "_score" : 1.0,
        "_source" : {
          "id" : 5,
          "name" : "Luis",
          "last_name" : "Martínez"
        }
      }
    ]
  }
}
```

```
}
},
{
  "_index": "alumnos",
  "_id": "7",
  "_score": 1.0,
  "_source": {
    "id": 7,
    "name": "Sofía",
    "last_name": "Ramírez"
  }
},
{
  "_index": "alumnos",
  "_id": "8",
  "_score": 1.0,
  "_source": {
    "id": 8,
    "name": "Pedro",
    "last_name": "Hernández"
  }
},
{
  "_index": "alumnos",
  "_id": "6",
  "_score": 1.0,
  "_source": {
    "title": "New Document",
    "content": "This is a new document for the master class",
    "tag": [
      "general",
      "testing"
    ]
  }
}
]
}
```

PARTE 5 - Opcional. KIBANA!

