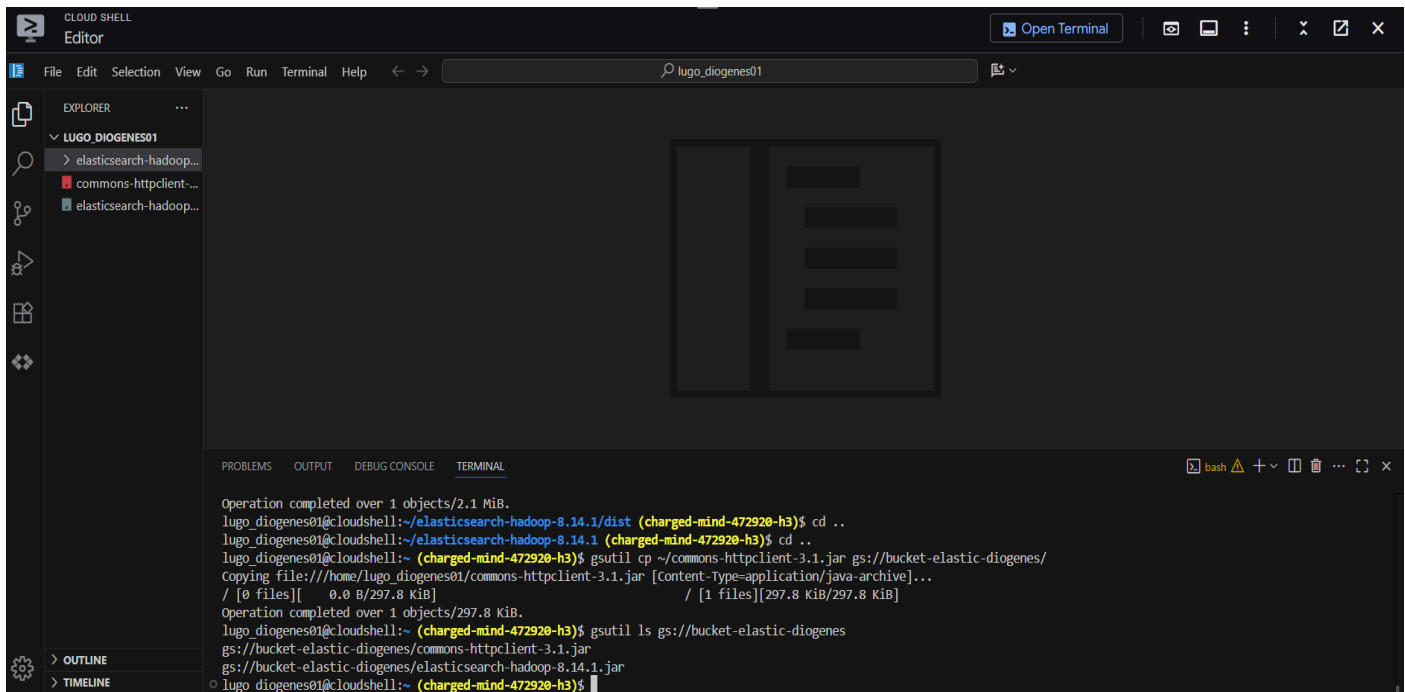


## #1 jars\_subidos\_al\_bucket



The screenshot shows a Cloud Shell Editor window with a dark theme. The Explorer panel on the left shows a file tree with 'LUGO\_DIOGENES01' expanded, containing 'elasticsearch-hadoop-8.14.1' and 'commons-httpclient-3.1.jar'. The Terminal panel at the bottom shows the following commands and output:

```
lugo_diogenes01@cloudshell:~/elasticsearch-hadoop-8.14.1/dist (charged-mind-472920-h3)$ cd ..
lugo_diogenes01@cloudshell:~/elasticsearch-hadoop-8.14.1 (charged-mind-472920-h3)$ cd ..
lugo_diogenes01@cloudshell:~ (charged-mind-472920-h3)$ gsutil cp ~/commons-httpclient-3.1.jar gs://bucket-elastic-diogenes/
Copying file:///home/lugo_diogenes01/commons-httpclient-3.1.jar [Content-Type=application/java-archive]...
/ [0 files][ 0.0 B/297.8 KiB] / [1 files][297.8 KiB/297.8 KiB]
Operation completed over 1 objects/297.8 KiB.
lugo_diogenes01@cloudshell:~ (charged-mind-472920-h3)$ gsutil ls gs://bucket-elastic-diogenes
gs://bucket-elastic-diogenes/commons-httpclient-3.1.jar
gs://bucket-elastic-diogenes/elasticsearch-hadoop-8.14.1.jar
lugo_diogenes01@cloudshell:~ (charged-mind-472920-h3)$
```

## #2 firewall\_config

```
lugo_diogenes01@elastic-server:~$ cat ~/elasticsearch_security_config.txt
#----- BEGIN SECURITY AUTO CONFIGURATION -----
#
# The following settings, TLS certificates, and keys have been automatically
# generated to configure Elasticsearch security features on 16-10-2025 14:54:30
#
# -----
#
# Enable security features
xpack.security.enabled: false
#
xpack.security.enrollment.enabled: false
#
# Enable encryption for HTTP API client connections, such as Kibana, Logstash, and Agents
xpack.security.http.ssl:
  enabled: true
  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-server"]
#
# 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 -----
lugo_diogenes01@elastic-server:~$
```

### #3 hive\_config

```
lugo_diogenes01@es-hadoop-cluster-m:~$ # JARs instalados
echo "=== JARs instalados en Hive ==="
ls
=== JARs instalados en Hive ===
commons-httpclient-3.1.jar elasticsearch-hadoop-8.14.1.jar
lugo_diogenes01@es-hadoop-cluster-m:~$ # Propiedades añadidas
echo ""
echo "=== Configuración de hive-site.xml ==="
tail -n 20 /etc/hive/conf.dist/hive-site.xml

=== Configuración de hive-site.xml ===
<property>
  <name>es.nodes</name>
  <value>35.187.91.93</value>
</property>

<property>
  <name>es.port</name>
  <value>9200</value>
</property>

<property>
  <name>es.nodes.wan.only</name>
  <value>true</value>
</property>

<property>
  <name>hive.aux.jars.path</name>
  <value>/usr/lib/hive/lib/elasticsearch-hadoop-8.14.1.jar,/usr/lib/hive/lib/commons-httpclient-3.1.jar</value>
</property>
</configuration>
lugo_diogenes01@es-hadoop-cluster-m:~$ # Reinicio y aplicación de cambios
echo ""
echo "=== Reiniciando Hive Metastore ==="
sudo systemctl restart hive-metastore

=== Reiniciando Hive Metastore ===
lugo_diogenes01@es-hadoop-cluster-m:~$
```

### #4.1 hadoop\_data\_ingestion\_part\_one

```
lugo_diogenes01@es-hadoop-cluster-m:~$ curl -X GET "http://35.187.91.93:9200/alumnos/_search?pretty"
{
  "took" : 262,
  "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" : "6",
        "_score" : 1.0,
        "_source" : {
          "title" : "New Document",
          "content" : "This is a new document for the master class",
          "tag" : [
            "general",
            "testing"
          ]
        }
      },
      {
        "_index" : "alumnos",
        "_id" : "3",
        "_score" : 1.0,
        "_source" : {
          "id" : 3,
          "name" : "Carlos",
          "last_name" : "González"
        }
      }
    ]
  }
}
```

## #4.2 hadoop\_data\_ingestion\_part\_two

```
    }  
  },  
  {  
    "_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"  
    }  
  }  
]  
}  
lugo_diogenes01@es-hadoop-cluster-m:~$
```

## #5 hive\_config

