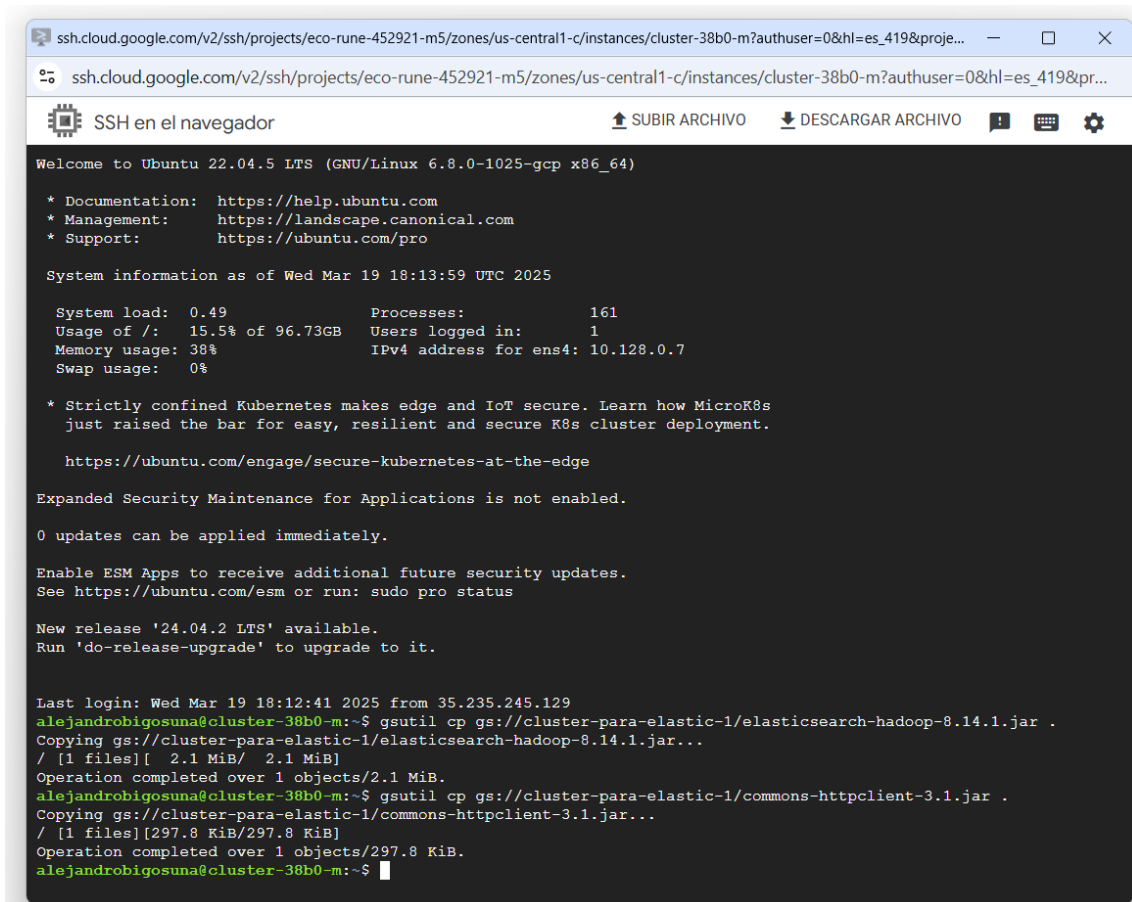


PUNTO 1



The screenshot shows a terminal window titled "SSH en el navegador" with a browser address bar displaying the SSH connection URL. The terminal output includes the Ubuntu welcome message, system information (load, processes, memory usage, etc.), and a series of commands and their outputs related to file transfers using gsutil. The user is identified as alejandrobigosuna on the cluster-38b0-m machine.

```
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/cluster-38b0-m?authuser=0&hl=es_419&proje...
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/cluster-38b0-m?authuser=0&hl=es_419&pr...
SSH en el navegador SUBIR ARCHIVO DESCARGAR ARCHIVO
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1025-gcp x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/pro

System information as of Wed Mar 19 18:13:59 UTC 2025

System load:  0.49           Processes:           161
Usage of /:   15.5% of 96.73GB Users logged in:       1
Memory usage: 38%           IPv4 address for ens4: 10.128.0.7
Swap usage:   0%

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
  just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

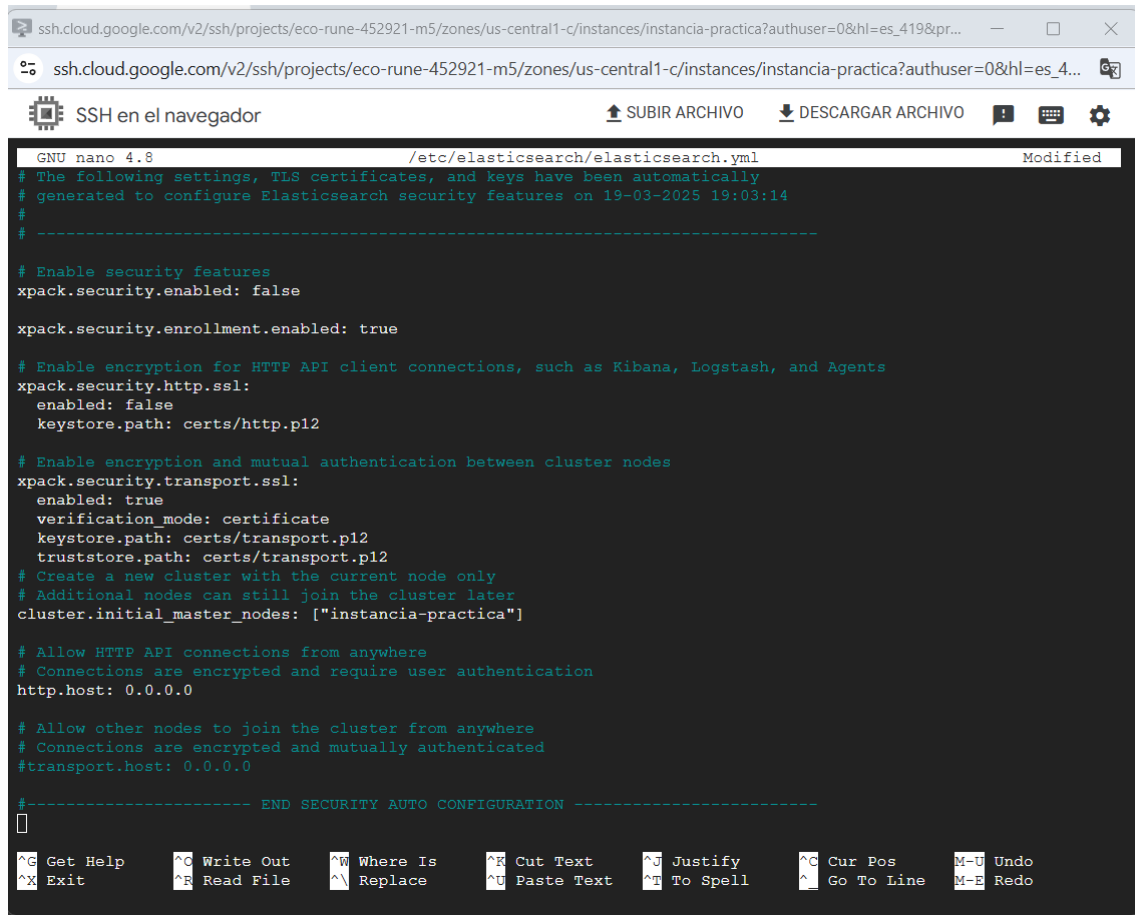
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Wed Mar 19 18:12:41 2025 from 35.235.245.129
alejandrobigosuna@cluster-38b0-m:~$ gsutil cp gs://cluster-para-elastic-1/elasticsearch-hadoop-8.14.1.jar .
Copying gs://cluster-para-elastic-1/elasticsearch-hadoop-8.14.1.jar...
/ [1 files][ 2.1 MiB/ 2.1 MiB]
Operation completed over 1 objects/2.1 MiB.
alejandrobigosuna@cluster-38b0-m:~$ gsutil cp gs://cluster-para-elastic-1/commons-httpclient-3.1.jar .
Copying gs://cluster-para-elastic-1/commons-httpclient-3.1.jar...
/ [1 files][297.8 KiB/297.8 KiB]
Operation completed over 1 objects/297.8 KiB.
alejandrobigosuna@cluster-38b0-m:~$
```

PUNTO 2



```
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/instancia-practica?authuser=0&hl=es_419&pr...
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/instancia-practica?authuser=0&hl=es_4...

SSH en el navegador SUBIR ARCHIVO DESCARGAR ARCHIVO

GNU nano 4.8 /etc/elasticsearch/elasticsearch.yml Modified
# The following settings, TLS certificates, and keys have been automatically
# generated to configure Elasticsearch security features on 19-03-2025 19:03:14
#
# -----
# 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: ["instancia-practica"]

# Allow HTTP API connections from anywhere
# Connections are encrypted and require user authentication
http.host: 0.0.0.0

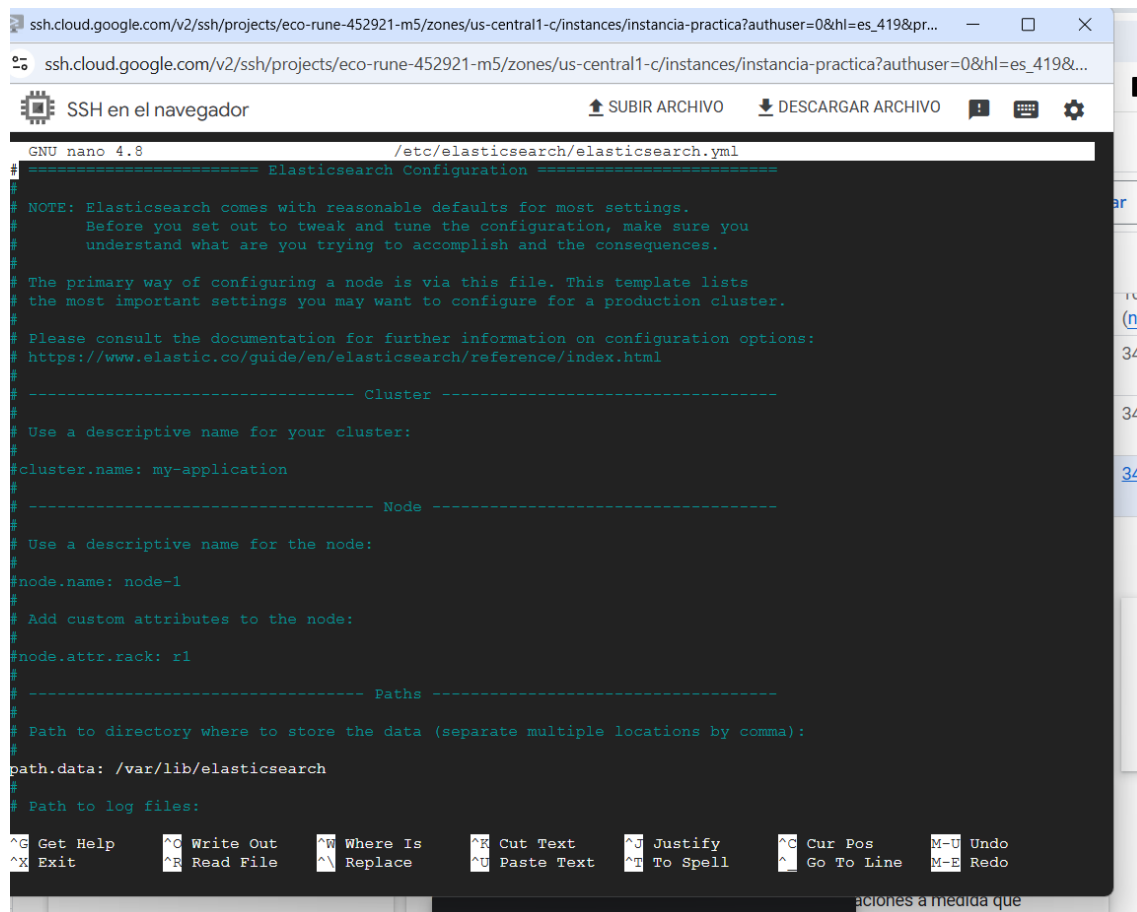
# Allow other nodes to join the cluster from anywhere
# Connections are encrypted and mutually authenticated
#transport.host: 0.0.0.0

#----- END SECURITY AUTO CONFIGURATION -----
[
^G Get Help ^C Write Out ^W Where Is ^R Cut Text ^J Justify ^C Cur Pos M-U Undo
^X Exit ^R Read File ^\ Replace ^U Paste Text ^Z To Spell ^_ Go To Line M-E Redo
```

PUNTO 3

```
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/cluster-38b0-m?authuser=0&hl=es_419&proje...
ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/cluster-38b0-m?authuser=0&hl=es_419...
SSH en el navegador SUBIR ARCHIVO DESCARGAR ARCHIVO
System information as of Wed Mar 19 19:09:06 UTC 2025
System load: 0.25 Processes: 155
Usage of /: 15.5% of 96.73GB Users logged in: 0
Memory usage: 39% IPv4 address for ens4: 10.128.0.7
Swap usage: 0%
* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
just raised the bar for easy, resilient and secure K8s cluster deployment.
https://ubuntu.com/engage/secure-kubernetes-at-the-edge
Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Wed Mar 19 18:14:00 2025 from 35.235.245.129
alejandrobigosuna@cluster-38b0-m:~$ sudo sed -i '$d' /etc/hive/conf.dist/hive-site.xml
alejandrobigosuna@cluster-38b0-m:~$ sudo sed -i '$a \ <property>\n <name>es.nodes</name>\n <value>AQUÍ LA
IP DE ELASTIC</value>\n </property>\n' /etc/hive/conf.dist/hive-site.xml
alejandrobigosuna@cluster-38b0-m:~$ sudo sed -i '$a \ <property>\n <name>es.port</name>\n <value>9200</val
ue>\n </property>\n' /etc/hive/conf.dist/hive-site.xml
alejandrobigosuna@cluster-38b0-m:~$ sudo sed -i '$a \ <property>\n <name>es.nodes.wan.only</name>\n <value
>true</value>\n </property>\n' /etc/hive/conf.dist/hive-site.xml
alejandrobigosuna@cluster-38b0-m:~$ sudo sed -i '$a \ <property>\n <name>hive.aux.jars.path</name>\n <value
>/usr/lib/hive/lib/elasticsearch-hadoop-8.14.1.jar,/usr/lib/hive/lib/commons-httpclient-3.1.jar</value>\n </prop
erty>\n</configuration>' /etc/hive/conf.dist/hive-site.xml
alejandrobigosuna@cluster-38b0-m:~$ sudo cp elasticsearch-hadoop-8.14.1.jar /usr/lib/hive/lib/
alejandrobigosuna@cluster-38b0-m:~$ sudo cp commons-httpclient-3.1.jar /usr/lib/hive/lib/
alejandrobigosuna@cluster-38b0-m:~$ sudo service hive-server2 restart
alejandrobigosuna@cluster-38b0-m:~$
```

PUNTO 4



```
GNU nano 4.8 /etc/elasticsearch/elasticsearch.yml
# ===== Elasticsearch Configuration =====
#
# NOTE: Elasticsearch comes with reasonable defaults for most settings.
#       Before you set out to tweak and tune the configuration, make sure you
#       understand what are you trying to accomplish and the consequences.
#
# The primary way of configuring a node is via this file. This template lists
# the most important settings you may want to configure for a production cluster.
#
# Please consult the documentation for further information on configuration options:
# https://www.elastic.co/guide/en/elasticsearch/reference/index.html
#
# ----- Cluster -----
#
# Use a descriptive name for your cluster:
#cluster.name: my-application
#
# ----- Node -----
#
# Use a descriptive name for the node:
#node.name: node-1
#
# Add custom attributes to the node:
#node.attr.rack: r1
#
# ----- Paths -----
#
# Path to directory where to store the data (separate multiple locations by comma):
#
#path.data: /var/lib/elasticsearch
#
# Path to log files:
```

ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/instancia-practica?authuser=0&hl=es_419&pr... — □ ×

ssh.cloud.google.com/v2/ssh/projects/eco-rune-452921-m5/zones/us-central1-c/instances/instancia-practica?authuser=0&hl=es_419&...

SSH en el navegador SUBIR ARCHIVO DESCARGAR ARCHIVO

```
GNU nano 4.8 /etc/elasticsearch/elasticsearch.yml
# ----- Various -----
#
# Allow wildcard deletion of indices:
#
#action.destructive_requires_name: false
#----- BEGIN SECURITY AUTO CONFIGURATION -----
#
# The following settings, TLS certificates, and keys have been automatically
# generated to configure Elasticsearch security features on 19-03-2025 19:03:14
#
# -----
#
# 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: ["instancia-practica"]
#
# Allow HTTP API connections from anywhere
# Connections are encrypted and require user authentication

^G Get Help      ^O Write Out    ^W Where Is     ^R Cut Text     ^J Justify      ^C Cur Pos      M-U Undo
^X Exit          ^R Read File    ^\ Replace      ^U Paste Text   ^T To Spell     ^_ Go To Line    M-E Redo
```

Acción en caso de coincidencia

Permitir

Destinos

Todas las instancias de la red

Filtro de origen

Rangos de IPv4

Rangos de IPv4 de origen *

35.238.38.32 X 0.0.0.0/0 X 35.185.14.148 X

Segundo filtro de origen

Ninguno

Filtro de destino

Ninguno

Protocolos y puertos ?

- ☐ Permitir todo
- ☒ Protocolos y puertos especificados

☒ TCP

Puertos

9200,5601

Este ejercicio me ha sido imposible realizarlo, no se los problemas que tengo con mi consola porque he tenido que crear varios proyectos y algo esta mal porque en el desarrollo de las clases hacia todos los ejercicios a la vez que usted y me salía perfecto, he ayudado a un compañero a realizar la practica entera y a la hora de hacerla yo que me la sabia ya de tanto realizarla, no había manera de arreglar estos problemas tanto del clúster como ahora.