Desafío 3
Actividad AWS

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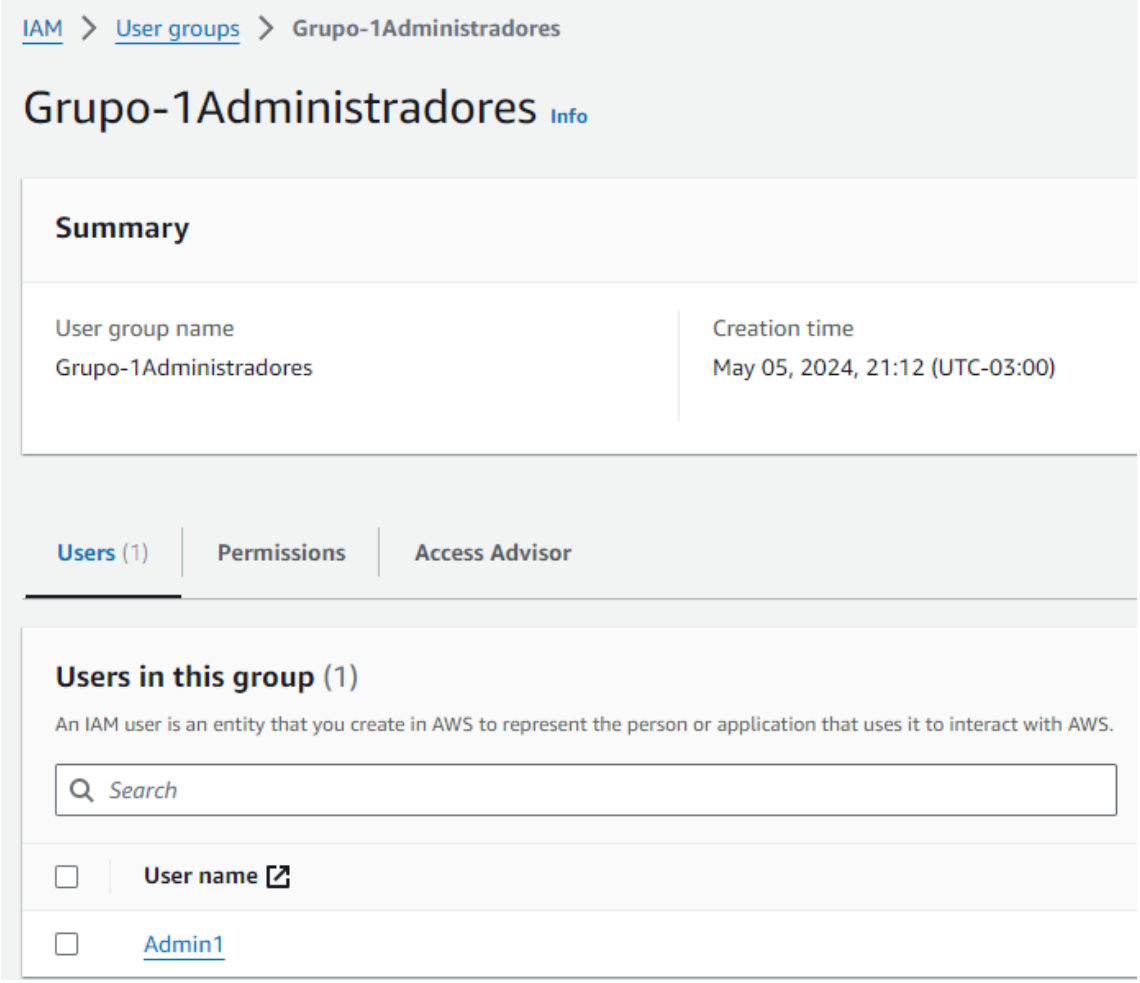
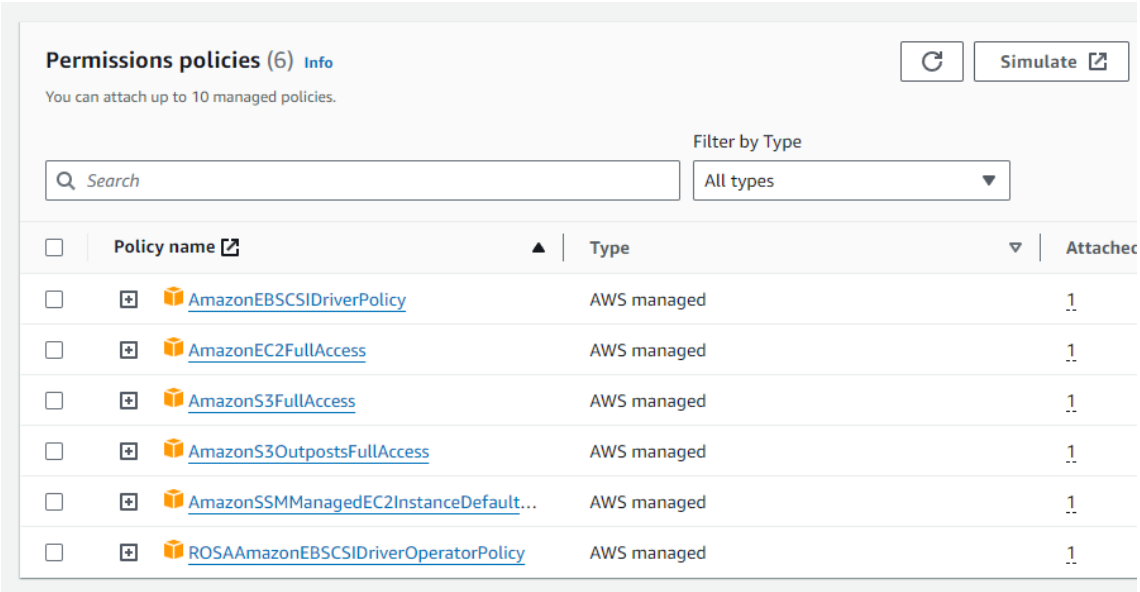
Curso: Bootcamp Devops Engineer

Fecha: 12/05/2024

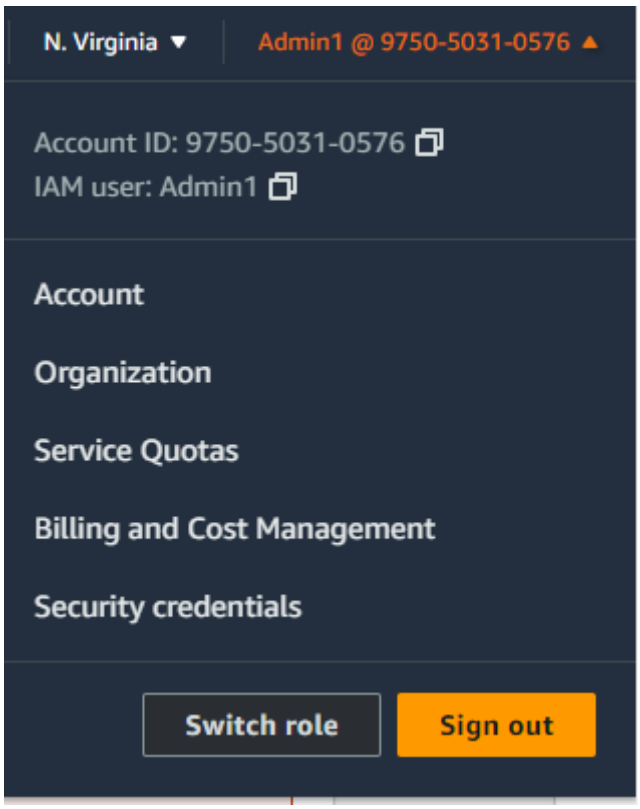
Desarrollo:

Las siguientes capturas evidencia lo primero enunciado en la actividad, creción de usuario, grupo, etc.



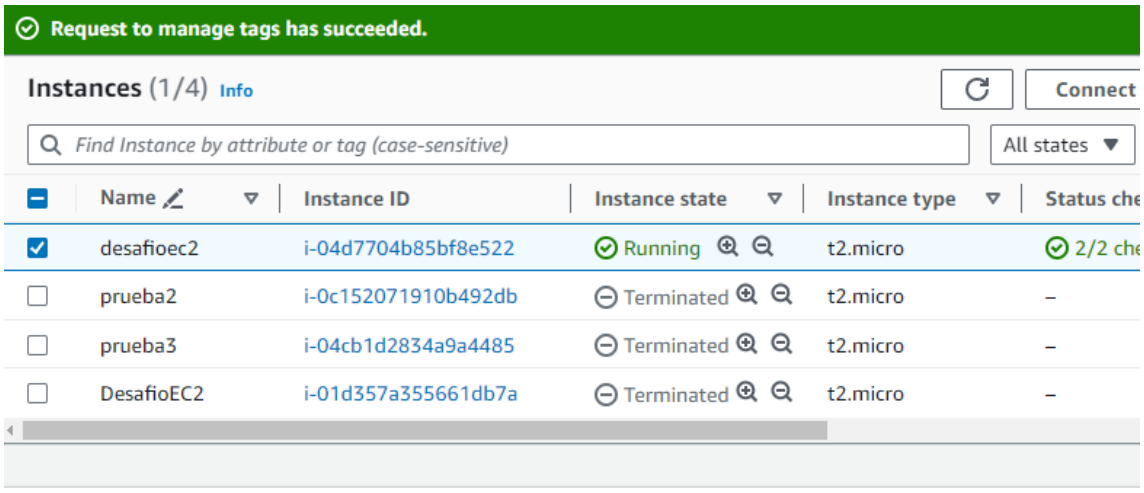


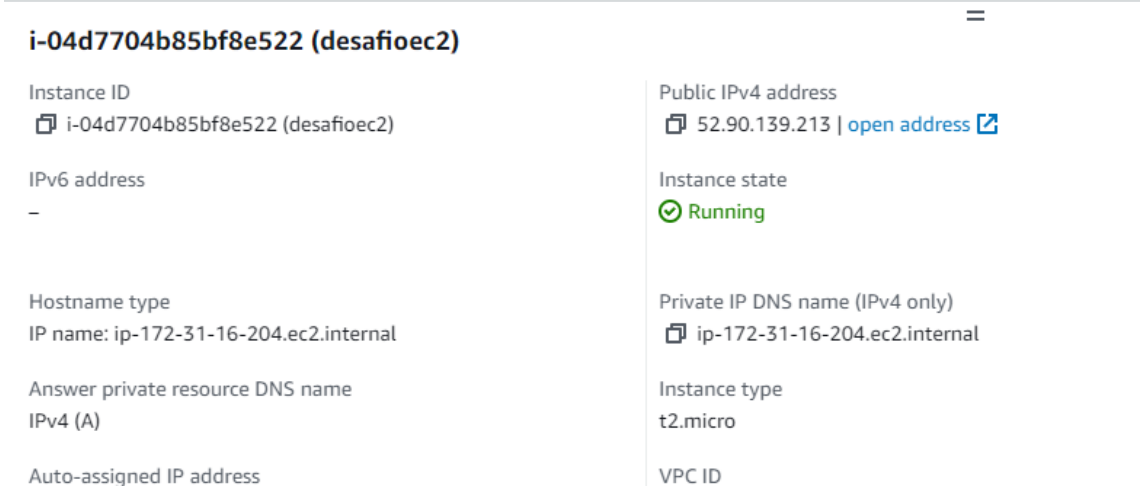
Se crea el usuario Admin1 con todos los permisos mencionados.

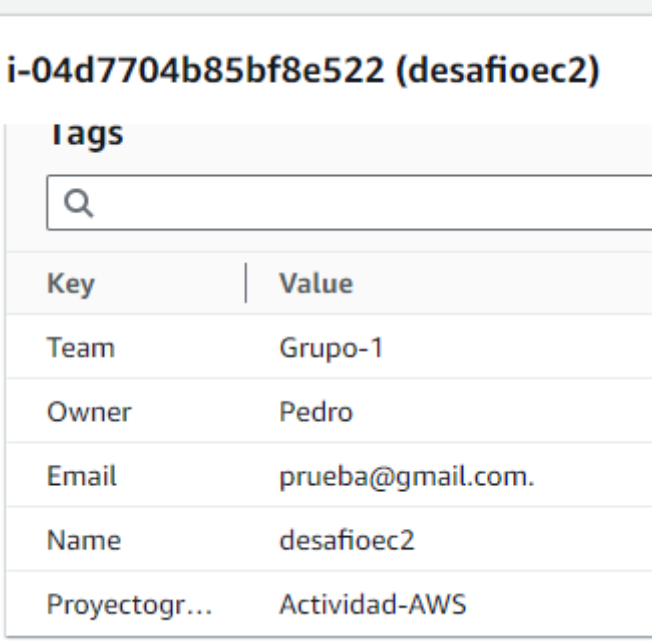


EC2

Se crea la instancia solicitada en el enunciado y se le agregan los tags y el user data para su arranque con apache.







Prueba de conexión:

El script que cargamos en User Data es el siguiente:

#!/bin/bash

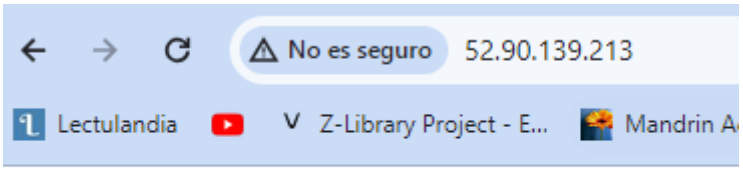
apt-get update –y

apt-get install apache2 -y

echo "mi instancia ec2" > /var/www/html/index.html

systemctl start apache2

Luego procedemos a probar la conexión y modificamos el html de apache con la leyenda "mi instancia ec2".



mi instancia ec2

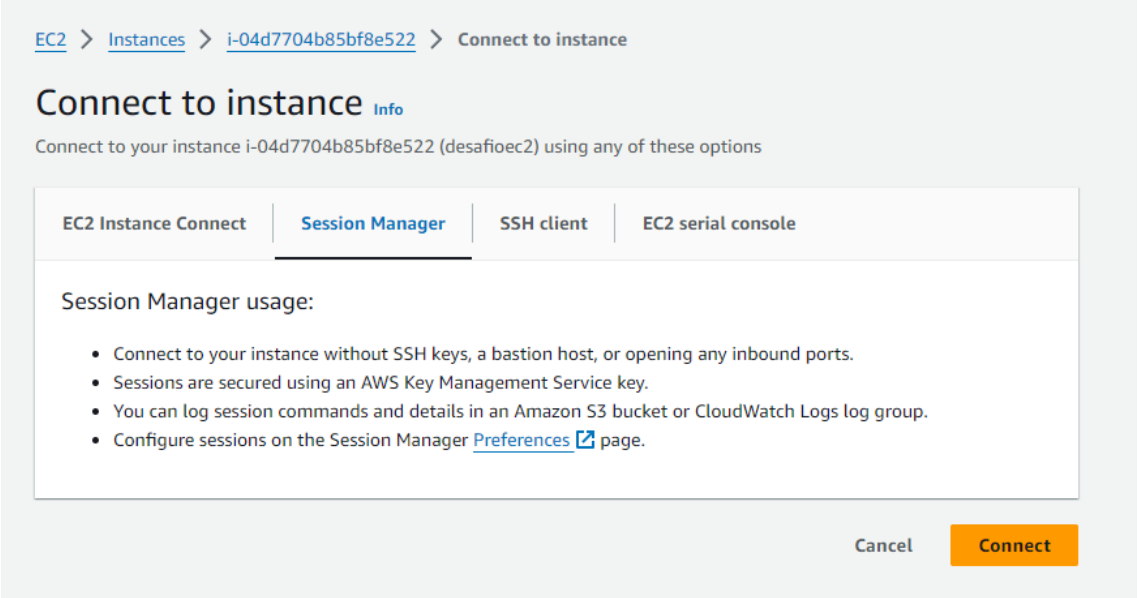
Conexión por SSH mediante Windows:

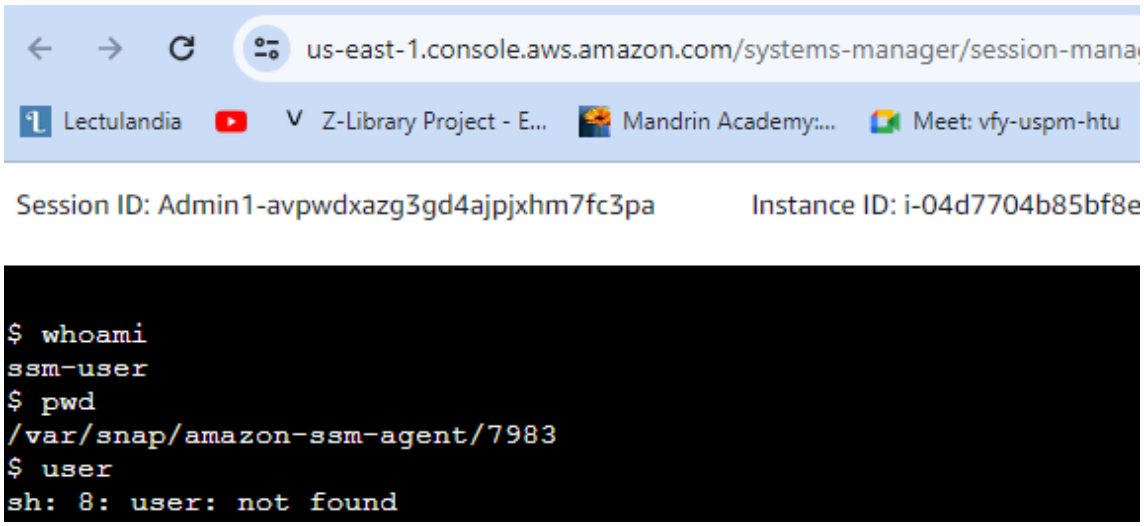
```
C:\Users\Jo>ssh -i C:\Users\Jo\Downloads\desafioec2.pem ubuntu@52.90.139.213
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1008-aws x86_64)

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

 System information as of Tue May  7 03:09:59 UTC 2024

  System load:  0.0               Processes:             109
  Usage of /:   26.3% of 6.71GB   Users logged in:       0
  Memory usage: 22%               IPv4 address for enX0: 172.31.16.204
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

11 updates can be applied immediately.
11 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
```

```
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-16-204:~$ ls
ubuntu@ip-172-31-16-204:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-16-204:~$
```

```
ubuntu@ip-172-31-16-204:~$ systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
     Active: active (running) since Tue 2024-05-07 02:45:10 UTC; 28min ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 1863 (apache2)
      Tasks: 55 (limit: 1130)
     Memory: 5.7M (peak: 6.0M)
        CPU: 128ms
     CGroup: /system.slice/apache2.service
             ├─1863 /usr/sbin/apache2 -k start
             ├─1865 /usr/sbin/apache2 -k start
             └─1866 /usr/sbin/apache2 -k start

May 07 02:45:10 ip-172-31-16-204 systemd[1]: Starting apache2.service - The Apache HTTP Server...
May 07 02:45:10 ip-172-31-16-204 systemd[1]: Started apache2.service - The Apache HTTP Server.
ubuntu@ip-172-31-16-204:~$
```

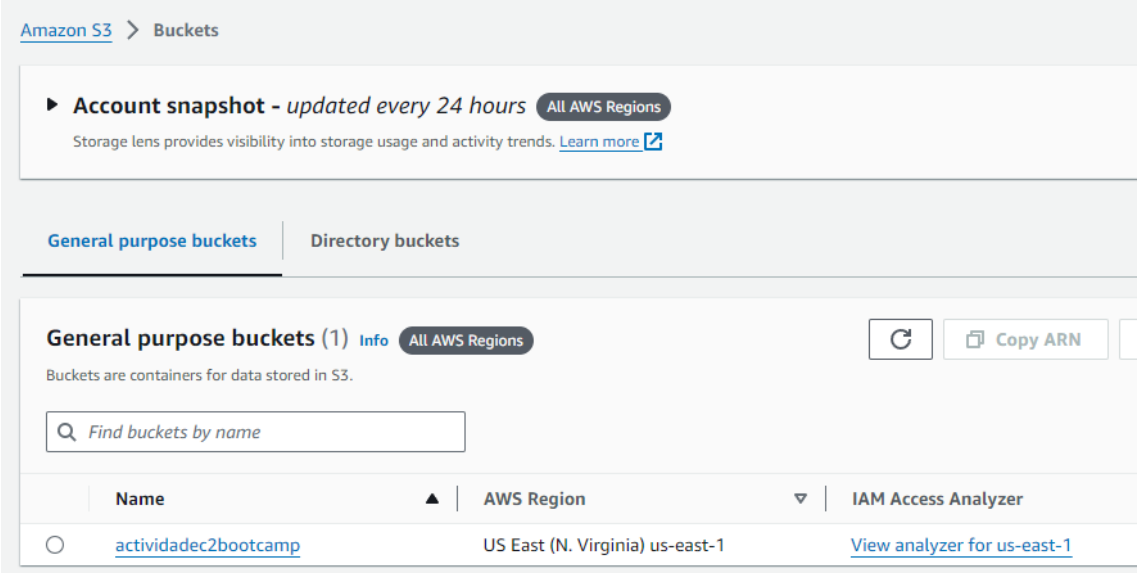
Añadiendo Rol de SSM a la instancia y añadiendo la política de SSMeC2 al User group, vamos a poder conectarnos tanto usuario root como usuarios dentro del grupo por Sesion Manager sin necesidad de key pairs, puertos, vpc, etc:

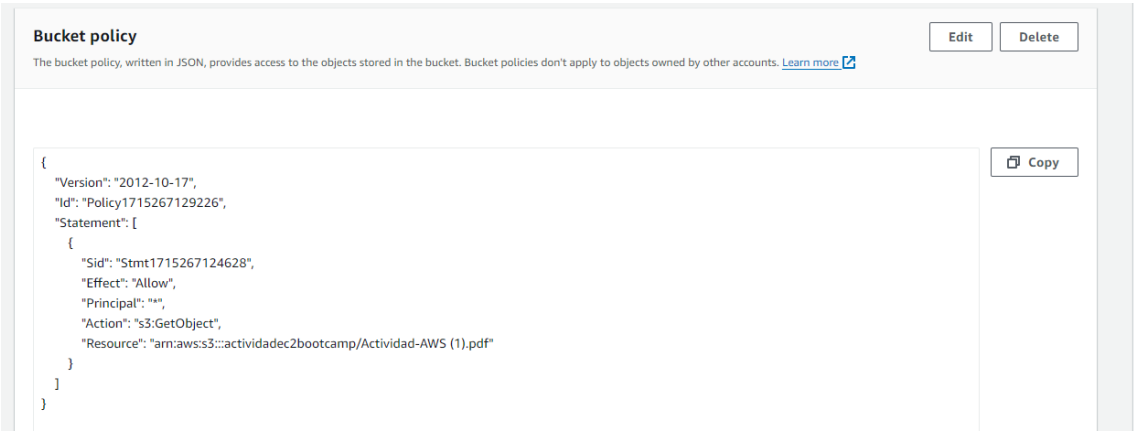


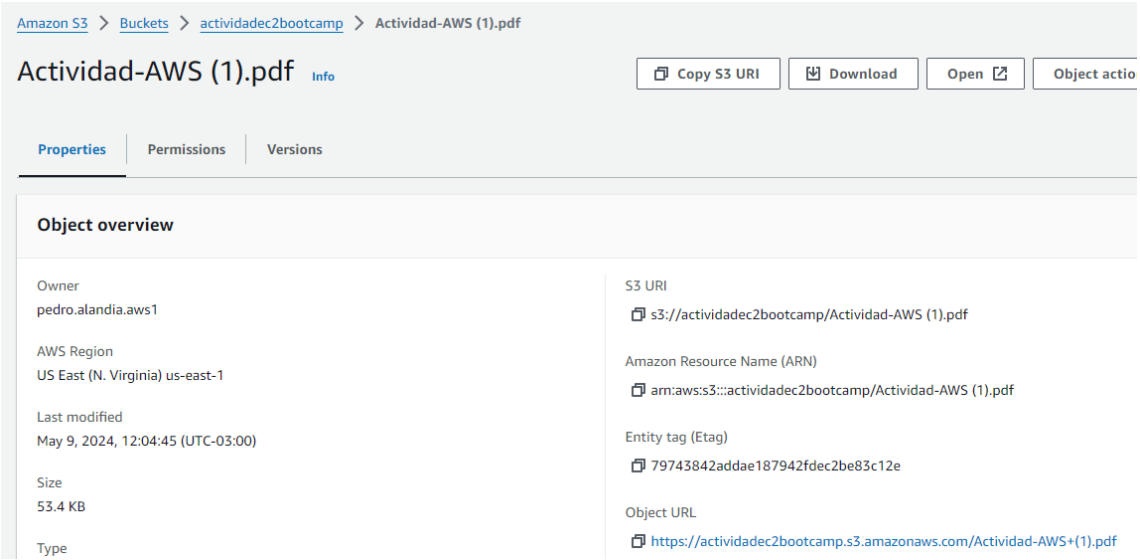

us-east-1.console.aws.amazon.com/systems-manager/session-mana
Lectulandia
Z-Library Project - E...
Mandrin Academy:...
Meet: vfy-uspm-htu
Session ID: Admin1-avpwdxazg3gd4ajpjxhm7fc3pa
Instance ID: i-04d7704b85bf8e
$ whoami
ssm-user
$ pwd
/var/snap/amazon-ssm-agent/7983
$ user
sh: 8: user: not found

S3

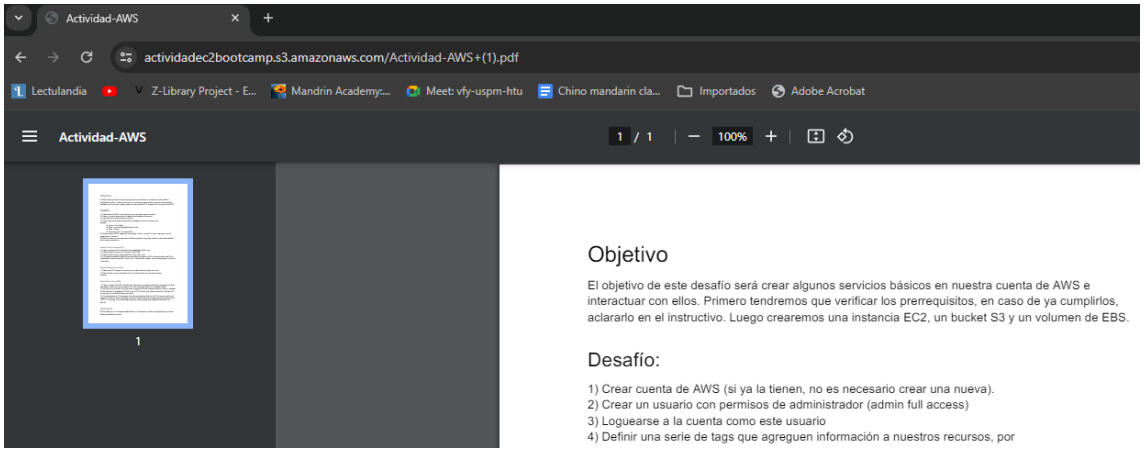
Creamos el bucket en s3 con nombre *actividadec2bootcamp* y permisos:





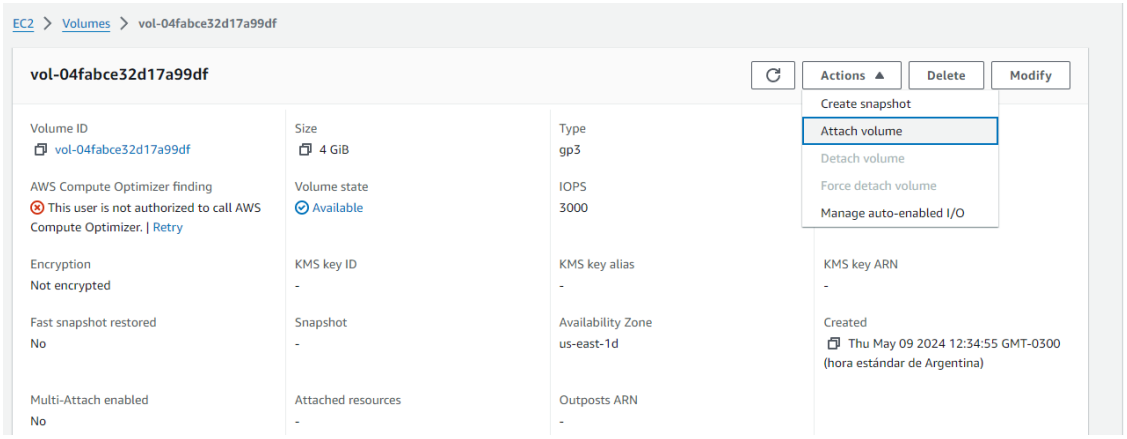


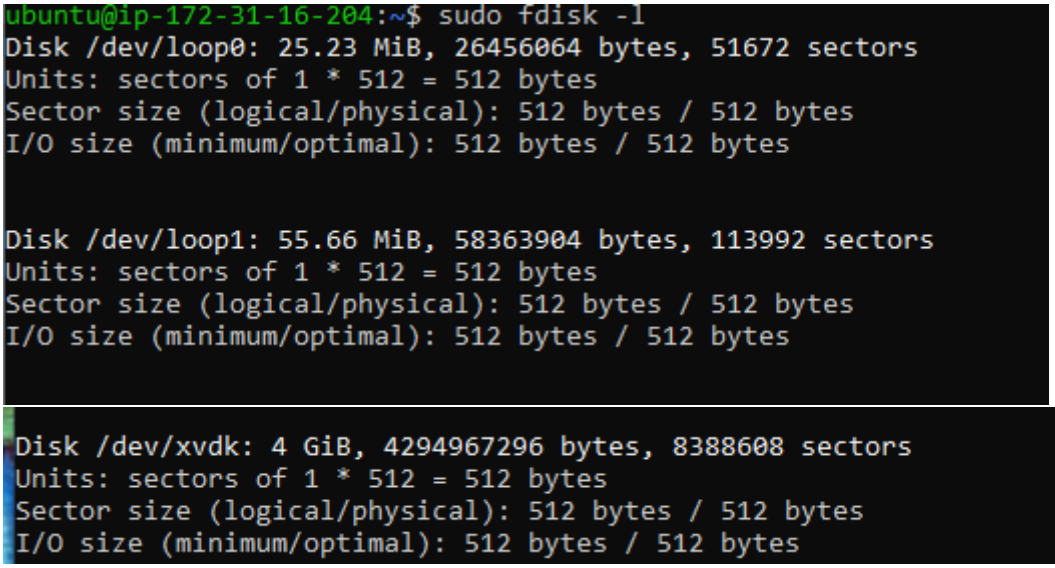
Probamos el ingreso con la **Object URL** que se configuró publica para todo acceso:



EBS

Se adjunta una unidad de 4 GB a nuestra instancia mencionada arriba y continuamos con lo solicitado en el enunciado de ebs.





```
ubuntu@ip-172-31-16-204:~$ sudo mkfs -t ext4 /dev/xvdk
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 1048576 4k blocks and 262144 inodes
Filesystem UUID: 0b1aafa2-7081-40e8-b764-92a50cdd66b6
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

ubuntu@ip-172-31-16-204:~$ lsblk
NAME     MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0      7:0    0 25.2M  1 loop /snap/amazon-ssm-agent/7983
loop1      7:1    0 55.7M  1 loop /snap/core18/2812
loop2      7:2    0 55.7M  1 loop /snap/core18/2823
loop3      7:3    0 38.7M  1 loop /snap/snapd/21465
xvda     202:0    0    8G  0 disk
├─xvda1  202:1    0    7G  0 part /
├─xvda14 202:14   0    4M  0 part
├─xvda15 202:15   0  106M  0 part /boot/efi
└─xvda16 259:0    0  913M  0 part /boot
xvdk     202:160  0    4G  0 disk
ubuntu@ip-172-31-16-204:~$
```

Para montar nuestra unidad, añadimos esta al fichero FSTAB modificándolo con el comando vi:

```
ubuntu@ip-172-31-16-204:~$ cat /etc/fstab
LABEL=cloudimg-rootfs   /        ext4   discard,commit=30,errors=remount-ro     0 1
LABEL=BOOT      /boot   ext4    defaults        0 2
LABEL=UEFI      /boot/efi       vfat    umask=0077      0 1
/dev/xvdk /desafios ext4 0 1
ubuntu@ip-172-31-16-204:~$
```

El comando “mount –a” monto todo lo que se haya agregado al FSTAB de manera permanente.

```
ubuntu@ip-172-31-16-204:~$ sudo mount -a
ubuntu@ip-172-31-16-204:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root       6.8G  1.9G  4.9G  28% /
tmpfs           479M     0  479M   0% /dev/shm
tmpfs           192M  868K  191M   1% /run
tmpfs           5.0M     0  5.0M   0% /run/lock
/dev/xvda16     881M   76M  744M  10% /boot
/dev/xvda15     105M  6.1M   99M   6% /boot/efi
tmpfs            96M   12K   96M   1% /run/user/1000
/dev/xvdk       3.9G   24K  3.7G   1% /desafios
ubuntu@ip-172-31-16-204:~$ lsblk
NAME     MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0      7:0    0 25.2M  1 loop /snap/amazon-ssm-agent/7983
loop1      7:1    0 55.7M  1 loop /snap/core18/2812
loop2      7:2    0 55.7M  1 loop /snap/core18/2823
loop3      7:3    0 38.7M  1 loop /snap/snapd/21465
xvda     202:0    0    8G  0 disk
├─xvda1  202:1    0    7G  0 part /
├─xvda14 202:14   0    4M  0 part
├─xvda15 202:15   0  106M  0 part /boot/efi
└─xvda16 259:0    0  913M  0 part /boot
xvdk     202:160  0    4G  0 disk /desafios
```

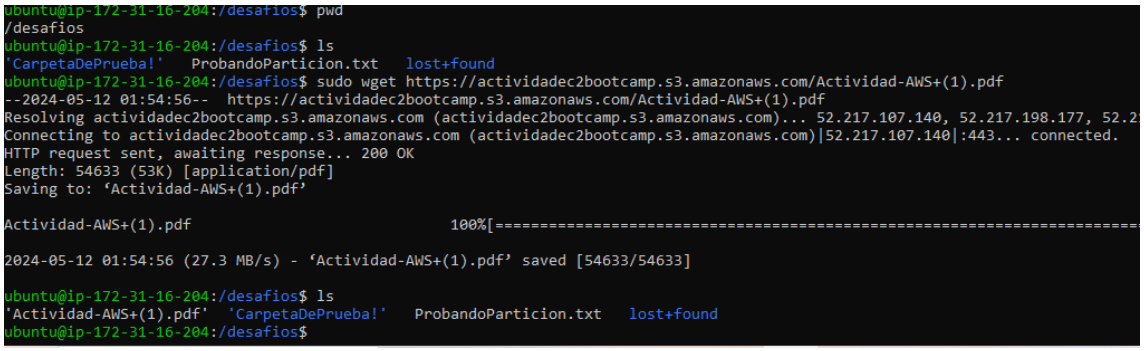
```
ubuntu@ip-172-31-16-204:~$ cat /etc/fstab
LABEL=cloudimg-rootfs   /        ext4   discard,commit=30,errors=remount-ro     0 1
LABEL=BOOT      /boot   ext4    defaults        0 2
LABEL=UEFI      /boot/efi       vfat    umask=0077      0 1
/dev/xvdk /desafios ext4 0 1
ubuntu@ip-172-31-16-204:~$
```

Escribimos en nuestra nueva unidad montada.

```
ubuntu@ip-172-31-16-204:/desafios$ sudo mkdir CarpetaDePrueba!
ubuntu@ip-172-31-16-204:/desafios$ ls
'CarpetaDePrueba!'   ProbandoParticion.txt   lost+found
ubuntu@ip-172-31-16-204:/desafios$
```

```
ubuntu@ip-172-31-16-204:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root       6.8G  1.9G  4.9G  28% /
tmpfs           479M     0  479M   0% /dev/shm
tmpfs           192M  868K  191M   1% /run
tmpfs           5.0M     0  5.0M   0% /run/lock
/dev/xvda16     881M   76M  744M  10% /boot
/dev/xvda15     105M  6.1M   99M   6% /boot/efi
/dev/xvdk       3.9G   28K  3.7G   1% /desafios
tmpfs            96M   12K   96M   1% /run/user/1000
ubuntu@ip-172-31-16-204:~$ cd /desafios
ubuntu@ip-172-31-16-204:/desafios$ ls
'CarpetaDePrueba!'   ProbandoParticion.txt   lost+found
ubuntu@ip-172-31-16-204:/desafios$ pwd
/desafios
ubuntu@ip-172-31-16-204:/desafios$
```

Traemos nuestro Archivo del desafío del Bucket creado anteriormente:



Me faltaría agregar información de la ***CarpetaDePrueba***! Para que me nos muestre en que disco está escrito.