

# Hoja01\_Herramientas\_02

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En este ejercicio vamos a crear Amazon Virtual Private Cloud (VPC) Además, en el grupo de seguridad vamos a crear la instancia EC2 ( Maquina virtual) y finalmente configuraremos y personalizamos la instancia EC2 para ejecutar un servidor web

## Crear una VPC

Crea una VPC con los siguientes datos:

Nombre: lab

CIDR: 10.0.0.0/16

En La zona: us-east-1a

Con una subred pública en el 10.0.0.0/24 y una subred privada 10.0.1.0/24

NO poner el gateways de NAT Y

la resolución de DNS estará

activa El resultado será:

VPC: [lab-vpc](#)

- Subnets:

- us-east-1a

- Public subnet name: [lab-subnet-public1-us-east-1a](#)

- Private subnet name: [lab-subnet-private1-us-east-1a](#)

- Route tables

- [lab-rtb-public](#)

- [lab-rtb-private1-us-east-1a](#)

- Network connections ◦

- [lab-igw](#)

### **Pasos a realizar:**

[illegible]

### Cantidad de subredes públicas [Información](#)

La cantidad de subredes públicas que se van a agregar a la VPC. Utilice subredes públicas para las aplicaciones web que deban ser accesibles públicamente a través de Internet.

0	1
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### Cantidad de subredes privadas [Información](#)

La cantidad de subredes privadas que se van a agregar a la VPC. Utilice subredes privadas para proteger los recursos del backend que no necesitan acceso público.

0	1	2
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#### ▼ Personalizar bloques de CIDR de subredes

Bloque de CIDR de la subred pública en us-east-1a

10.0.0.0/24	256 IPs
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Bloque de CIDR de la subred privada en us-east-1a

10.0.1.0/24	256 IPs
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### Gateways NAT (\$) [Información](#)

Elija el número de zonas de disponibilidad (AZ) en las que crear gateway NAT. Tenga en cuenta que hay un cargo por cada puertan de enlace NAT.

Ninguna	En 1 AZ	1 por zona de disponibilidad
---------	---------	------------------------------

### Puntos de enlace de la VPC [Información](#)

Los puntos de enlace pueden ayudar a reducir los cargos de gateway NAT y mejorar la seguridad gracias a la posibilidad de acceder a S3 directamente desde la VPC. De forma predeterminada, se utiliza una política de acceso completo. Puede personalizar esta política en cualquier momento.

Ninguna	Gateway de S3
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### Opciones de DNS [Información](#)

- ☒ Habilitar nombres de host DNS
- ☒ Habilitar la resolución de DNS

#### ▼ Etiquetas adicionales

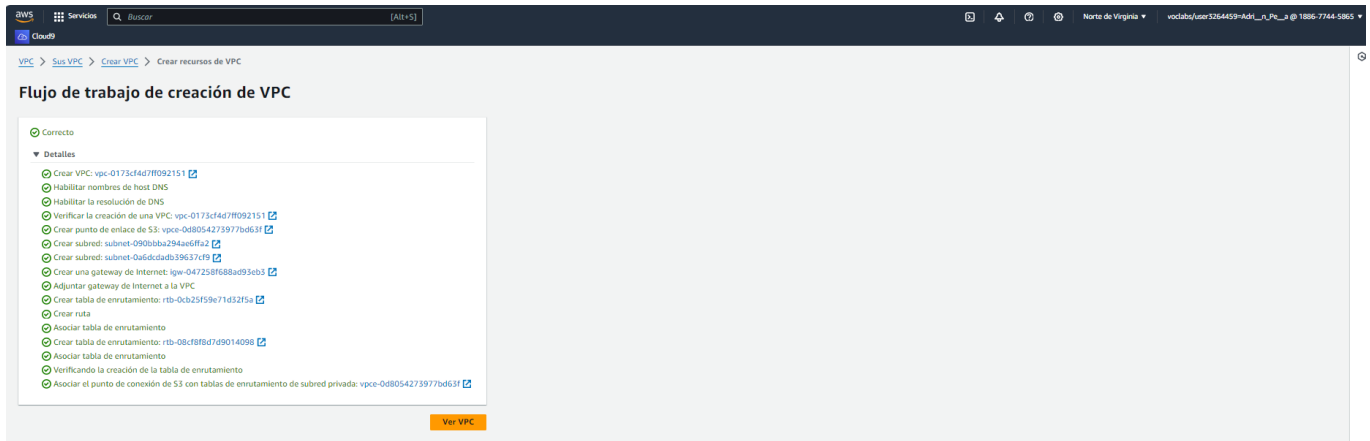
Agregue etiquetas a la VPC y a todos los recursos dentro de la VPC. No establezca aquí la etiqueta Nombre. Establezca la etiqueta Nombre en Name tag auto-generation (Generación automática de etiquetas de nombre) más arriba o directamente en el visualizador.

Agregar nueva etiqueta
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Puede agregar 49 más etiquetas.

Cancelar

Crear VPC



Una *puerta de enlace de Internet* es un recurso de VPC que permite la comunicación entre instancias EC2 en su VPC e Internet.

La subred pública **lab-subnet-public1-us-east-1a** tiene un CIDR de **10.0.0.0/24**, lo que significa que contiene todas las direcciones IP que comienzan con **10.0.0.x**. El hecho de que la tabla de rutas asociada con esta subred pública enrute el tráfico de red 0.0.0.0/0 a la puerta de enlace de Internet es lo que la convierte en una subred pública.

La subred privada **lab-subnet-private1-us-east-1a** tiene un CIDR de **10.0.1.0/24**, lo que significa que contiene todas las direcciones IP que comienzan con **10.0.1.x**.

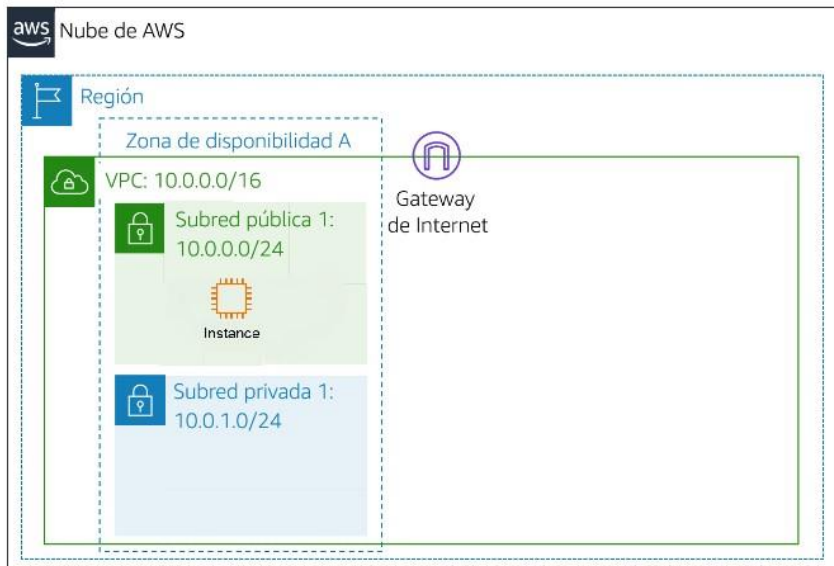


Tabla de enrutamiento pública

Destino	Objetivo
10.0.0.0/16	Local
0.0.0.0/0	Gateway de Internet

## Crear un grupo de seguridad

Creamos un grupo de seguridad de nombre grupo-seguridad-web que permita abrir el puerto 80

Nombre: grupo-seguridad-web

Descripción: habilitar los puertos de web

VPC que pertenezca al grupo Lab

Abrir el puerto 80

VPC: vpc-0173c4d7f092151 (lab-vpc)

**Reglas de entrada**

Tipo	Protocolo	Intervalo de puertos	Origen	Descripción: opcional
HTTP	TCP	80	Anywhere-IPv4	0.0.0.0/0

Agregar regla

Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

**Reglas de salida**

Tipo	Protocolo	Intervalo de puertos	Destino	Descripción: opcional
Todo el tráfico	Todo	Todo	Personalizada	0.0.0.0/0

Agregar regla

Rules with destination of 0.0.0.0/0 or ::/0 allow your instances to send traffic to any IPv4 or IPv6 address. We recommend setting security group rules to be more restrictive and to only allow traffic to specific known IP addresses.

**Etiquetas: opcional**

Las etiquetas son rótulos que se asignan a un recurso de AWS. Cada etiqueta consta de una clave y un valor opcional. Puede utilizarlas para buscar entre sus recursos y filtrarlos, o para hacer un seguimiento de sus costos en AWS.

No hay etiquetas asociadas a este recurso.

Agregar nueva etiqueta

Puede agregar hasta 50 etiquetas más.

Cancelar **Crear grupo de seguridad**

## Crear una Máquina Virtual

Crear una instancia EC2 en la subred pública creada con anterioridad

Nombre: miServidorWeb

Crearemos una máquina Ubuntu server 22.04 con disco SSD

Con un T2 medium

Selecciona el par de claves **vockey** (siempre para los laboratorios eligiremos estas claves)

Crearla en la subred pública **lab-subnet-public1-us-east-1a** y activar la ip pública

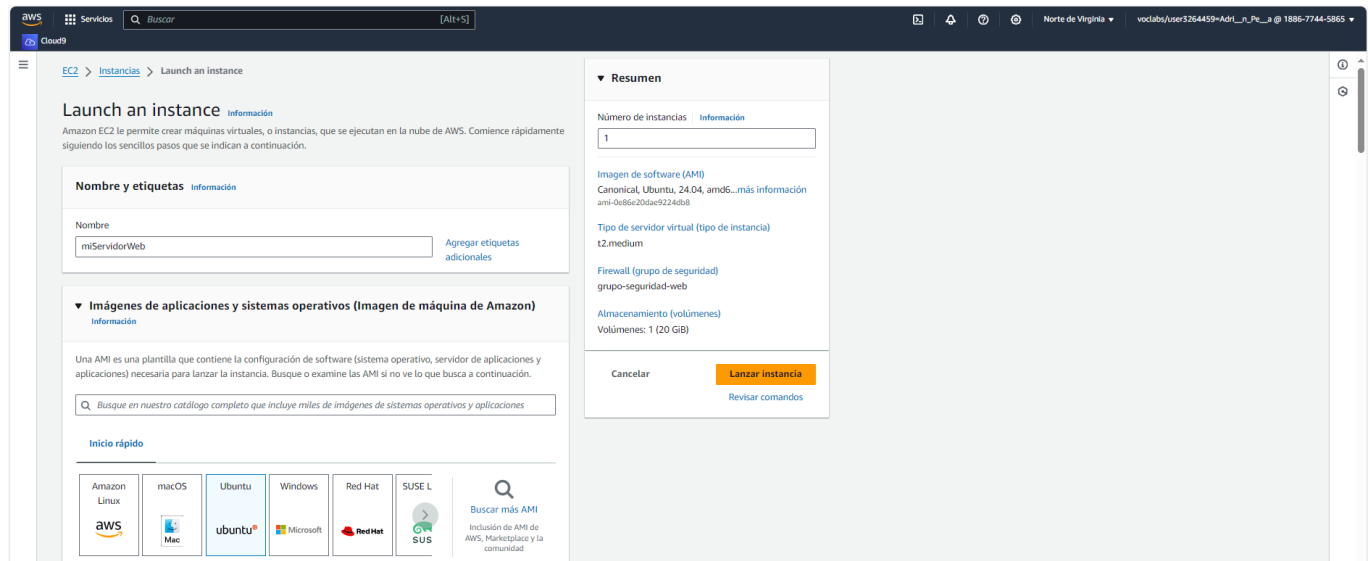
Que tenga el grupo de seguridad **grupo-seguridad-web**

Con 20 gigas de disco conectarnos a la máquina

En la instancia desde la opción **Connect** seleccionamos **EC2 instance Connect** , como no hemos cambiado el usuario será ubuntu.

Para ello utiliza el para de claves vockey, lo acaba de inyectar para conectarnos

Podemos trabajar directamente conectados a esta consola



▼ Configuraciones de red Información

VPC : obligatorio Información

vpc-0173cf4d7ff092151 (lab-vpc)  
10.0.0.0/16



Subred Información

subnet-090bbba294ae6ffa2 lab-subnet-public1-us-east-1a  
VPC: vpc-0173cf4d7ff092151 Propietario: 188677445865  
Zona de disponibilidad: us-east-1a Tipo de zona: Zona de disponibilidad  
Direcciones IP disponibles: 251 CIDR: 10.0.0.0/24



Crear nueva subred [↗](#)

Asignar automáticamente la IP pública Información

Habilitar

Se aplican cargos adicionales cuando no se cumplen los límites del nivel gratuito

Firewall (grupos de seguridad) Información

Un grupo de seguridad es un conjunto de reglas de firewall que controlan el tráfico de la instancia. Agregue reglas para permitir que un tráfico específico llegue a la instancia.

☐ Crear grupo de seguridad

☒ Seleccionar un grupo de seguridad existente

Grupos de seguridad comunes Información

Seleccionar grupos de seguridad

grupo-seguridad-web sg-0ed8e829b8f0ae154 X  
VPC: vpc-0173cf4d7ff092151



Compare reglas de grupo de seguridad

Los grupos de seguridad que agrega o elimine aquí se agregarán a todas las interfaces de red o se eliminarán de ellas.

► Configuración de red avanzada

▼ Configurar almacenamiento Información

Avanzado

1x 20 GiB gp3 Volumen raíz (Sin cifrar)

```
aws Services Search [Alt+S]

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

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

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-10-0-0-150:~$ pwd
/home/ubuntu
ubuntu@ip-10-0-0-150:~$
```

i-0124069307210f7b6 (MiServidorWeb)

PublicIPs: 54.227.71.42 PrivateIPs: 10.0.0.150

O tenemos la opción de conectarnos desde el terminal utilizando bien WindowsPowerShell o Putty ambos utilizan el protocolo SSH por lo que debemos modificar el grupo de seguridad e incorporar el puerto 22 para permitir la conexión

La conexión a utilizar en Windows PowerShell es **SSH cliente**

Para ver donde se encuentran las credenciales voykey, nos vamos al panel del laboratorio y vamos a la opción AWS Detalles



► Start Lab   ■ End Lab   ⓘ AWS Details   ⓘ Readme   ↺ Reset   ✕

Clo

## Cloud Access

AWS CLI: Show

## Cloud Labs

Remaining session time: 03:13:08(194 minutes)

Session started at: 2023-10-19T09:39:10-0700

Session to end at: 2023-10-19T13:39:10-0700

Accumulated lab time: 12:01:00 (721 minutes)

No running instance

SSH key Show Download PEM Download PPK

AWS SSO Download URL

AWSAccountId	911833685022
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Region	us-east-1
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y podemos descargar el archivo.pem para utilizar WindowsPowerShell o el archivo.PPK para Putty

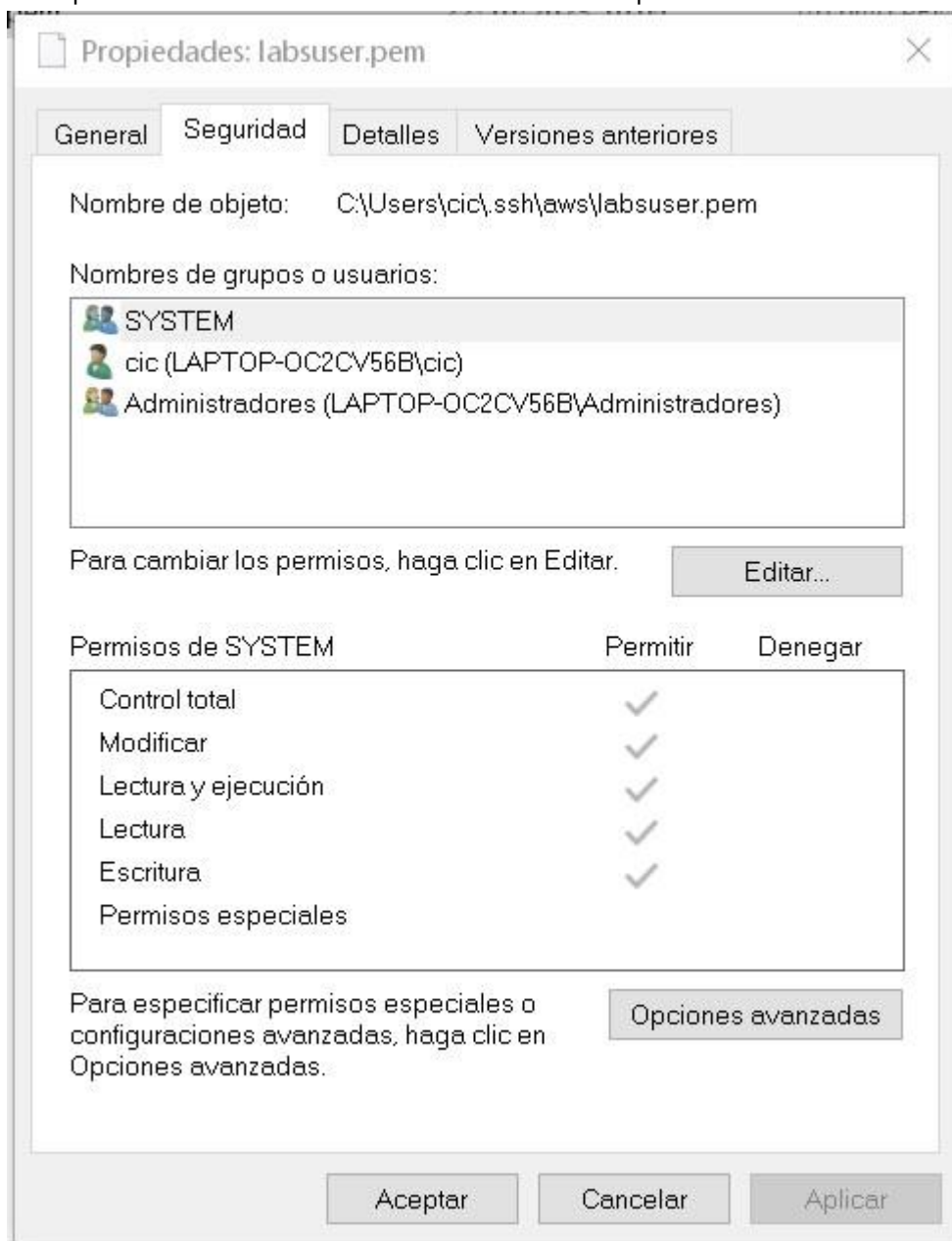
Al descargar el archivo en vez de denominarlo vockey se denomina **labuser**.

```
ssh -i <ruta_archivo_labuser.pem> ubuntu@<IP_pública>
```

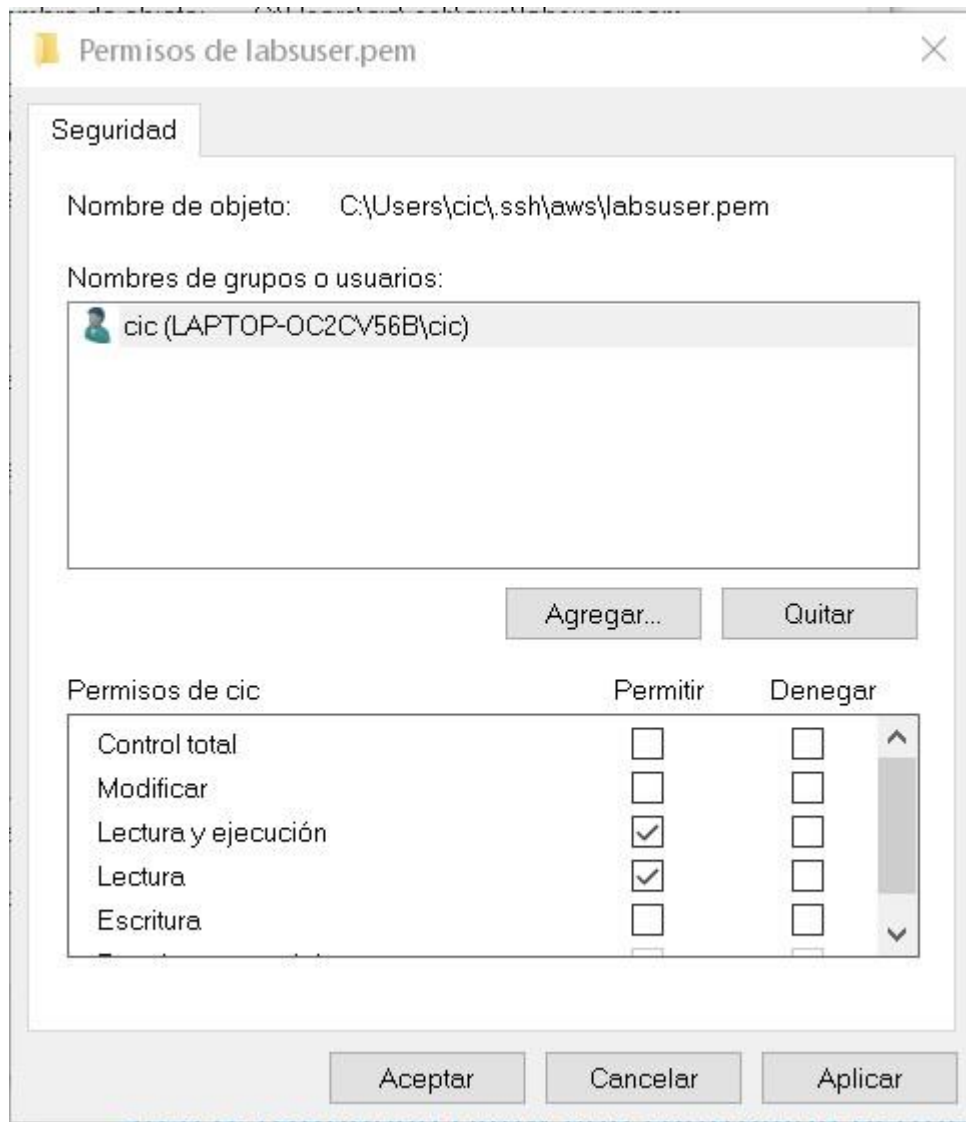
Nos muestra el siguiente error

```
PS C:\Users\cic\.ssh\aws> ssh -i labuser.pem ubuntu@ec2-54-227-71-42.compute-1.amazonaws.com
Warning: Identity file labuser.pem not accessible: No such file or directory.
The authenticity of host 'ec2-54-227-71-42.compute-1.amazonaws.com (54.227.71.42)' can't be established.
ECDSA key fingerprint is SHA256:P1HnbXn0vXAkIzRunb79dB4Jwbzxf6dgrcbrZxJAx4.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-54-227-71-42.compute-1.amazonaws.com,54.227.71.42' (ECDSA) to the list of known hosts.
ubuntu@ec2-54-227-71-42.compute-1.amazonaws.com: Permission denied (publickey).
PS C:\Users\cic\.ssh\aws>
```

Como la conexión la estamos realizando desde una máquina windows tenemos que quitar permisos al fichero labuser.pem y solo dejar como usuario solo a nuestro usuario. Si es linux cambiamos los permisos cono indica en la pantalla de conexión SSH cliente. En Windows primero tenemos:



Para quedar, solo dejar permisos con el usuario que estoy:



Abrimos de nuevo una consola de Windows PowerShell y ahora nos dejará conectarnos

```
PS C:\Users\cic\.ssh\aws> ssh -i "labuser.pem" ubuntu@ec2-54-205-151-168.compute-1.amazonaws.com
The authenticity of host 'ec2-54-205-151-168.compute-1.amazonaws.com (54.205.151.168)' can't be established.
ECDSA key fingerprint is SHA256:P1HnbXn0vXAkIzRunb79dB4Jwbzxzf6dgrcbrZxJAx4.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-54-205-151-168.compute-1.amazonaws.com,54.205.151.168' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.2.0-1012-aws x86_64)

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

System information as of Sun Oct 22 11:14:34 UTC 2023

System load:  0.0          Processes:      110
Usage of /:   9.6% of 19.20GB Users logged in: 1
Memory usage: 6%          IPv4 address for eth0: 10.0.0.150
Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

https://ubuntu.com/aws/pro

Expanded Security Maintenance for Applications is not enabled.

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

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

Last login: Sun Oct 22 10:39:04 2023 from 18.206.107.27
ubuntu@ip-10-0-0-150: $
```

Si quieres conectarte utilizando Putty sigue el manual de ayuda que figura en la consola de AWS [Usuarios de Windows: Uso de SSH para conectarse](#)

## Crear una ip pública fija

Para que cada vez que arranquemos la máquina no nos cambie la IP pública deberemos crear una **Elastic IP** que dependa de la zona **us-east-1** y luego asociar a esa ip a la máquina creada así tendremos siempre la misma ip Nos queda:

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
<input checked="" type="checkbox"/> ip pública maquina	54.205.151.168	Public IP	eipalloc-001968a36685b8c37	–
<input type="checkbox"/> Laboratorio-eip-us-east-1a	54.209.212.245	Public IP	eipalloc-0b24c883b1b171776	–

54.205.151.168	Public IP	eipalloc-001968a36685b8c37	–
Association ID eipassoc-014ed942f441fbb34	Scope VPC	Associated instance ID i-0124069307210f7b6	Private IP address 10.0.0.150
Network interface ID eni-03dda5086c8dba614	Network interface owner account ID 911833685022	Public DNS ec2-54-205-151-168.compute-1.amazonaws.com	NAT Gateway ID –

```
ubuntu@ip-10-0-0-168: ~
System Information as of Mon Sep 23 17:18:56 UTC 2024

System load: 0.88      Processes:      113
Usage of /:  0.3% of 18.36GB   Users logged in: 0
Memory usage: 5%      IPv4 address for enx0: 10.0.0.168
Swap usage:  0%

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

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

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-10-0-0-168:~$ ubuntu@ip-10-0-0-168:~$
ubuntu@ip-10-0-0-168:~$
```

## Crear un Servidor Web

Con alguna de las conexiones anteriores vamos a instalar el servidor web de apache y el php, seguir los pasos indicados en la práctica **hoja01\_Herramientas\_01**.

```
ubuntu@ip-10-0-0-168: ~
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-10-0-0-168:~$ ubuntu@ip-10-0-0-168:~$
ubuntu@ip-10-0-0-168:~$ sudo apt update
ubuntu@ip-10-0-0-168:~$ sudo apt upgrade -y
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5082 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [381 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [110 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [538 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [128 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [8548 B]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [374 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [154 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [45.0 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [14.6 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [353 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [68.1 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [424 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [14.4 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3608 B]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [212 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [532 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [10.6 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [10.8 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [17.6 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1104 B]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:37 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [377 kB]
Get:38 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [81.5 kB]
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [4516 B]
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [270 kB]
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [113 kB]
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [10.1 kB]
Get:44 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [383 kB]
Get:45 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [68.1 kB]
Get:46 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [428 B]
Get:47 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [10.9 kB]
Get:48 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [2808 B]
Get:49 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [288 B]
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [344 B]
Fetched 29.0 MB in 4s (7872 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```

ubuntu@ip-10-0-0-168:~$
139 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-10-0-0-168:~$ sudo apt install apache2 -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-dbd-sqlite3 liblua5.4-0 ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-dbd-sqlite3 liblua5.4-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 139 not upgraded.
Need to get 2883 kB of archives.
After this operation, 8094 kB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libapr1t64 amd64 1.7.2-3.1buildd1 [107 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1t64 amd64 1.6.3-1.1ubuntu7 [91.9 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.3-1.1ubuntu7 [11.2 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.3-1.1ubuntu7 [9116 B]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 liblua5.4-0 amd64 5.4.6-3buildd1 [166 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 apache2-bin amd64 2.4.58-1ubuntu4 [1329 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 apache2-data amd64 2.4.58-1ubuntu4 [163 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 apache2-utils amd64 2.4.58-1ubuntu4 [97.1 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 apache2 amd64 2.4.58-1ubuntu4 [580.2 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 ssl-cert all 1.1.2ubuntu1 [17.8 kB]
Fetched 2883 kB in 6s (33.6 MB/s)
Unpacking packages...
Selecting previously unselected package libapr1t64:amd64.
(Reading database ... 67741 files and directories currently installed.)
Preparing to unpack .../0-libapr1t64_1.7.2-3.1buildd1_amd64.deb ...
Unpacking libapr1t64:amd64 (1.7.2-3.1buildd1) ...
Selecting previously unselected package libaprutil1t64:amd64.
Preparing to unpack .../1-libaprutil1t64_1.6.3-1.1ubuntu7_amd64.deb ...
Unpacking libaprutil1t64:amd64 (1.6.3-1.1ubuntu7) ...
Selecting previously unselected package libaprutil1-dbd-sqlite3:amd64.
Preparing to unpack .../2-libaprutil1-dbd-sqlite3_1.6.3-1.1ubuntu7_amd64.deb ...
Unpacking libaprutil1-dbd-sqlite3:amd64 (1.6.3-1.1ubuntu7) ...
Selecting previously unselected package libaprutil1-dbd-sqlite3:amd64.
Preparing to unpack .../3-libaprutil1-dbd-sqlite3_1.6.3-1.1ubuntu7_amd64.deb ...
Unpacking libaprutil1-dbd-sqlite3:amd64 (1.6.3-1.1ubuntu7) ...
Selecting previously unselected package libaprutil1-dbd-sqlite3:amd64.
Preparing to unpack .../4-libaprutil1-dbd-sqlite3_1.6.3-1.1ubuntu7_amd64.deb ...
Unpacking libaprutil1-dbd-sqlite3:amd64 (1.6.3-1.1ubuntu7) ...
Selecting previously unselected package libaprutil1-dbd-sqlite3:amd64.
Preparing to unpack .../5-apache2-bin_2.4.58-1ubuntu4_amd64.deb ...
Unpacking apache2-bin (2.4.58-1ubuntu4) ...
Selecting previously unselected package apache2-data.
Preparing to unpack .../6-apache2-data_2.4.58-1ubuntu4_all.deb ...
Unpacking apache2-data (2.4.58-1ubuntu4) ...
Selecting previously unselected package apache2-utils.
Preparing to unpack .../7-apache2-utils_2.4.58-1ubuntu4_amd64.deb ...
Unpacking apache2-utils (2.4.58-1ubuntu4) ...
Selecting previously unselected package apache2.
Preparing to unpack .../8-apache2_2.4.58-1ubuntu4_amd64.deb ...
Unpacking apache2 (2.4.58-1ubuntu4) ...
Selecting previously unselected package ssl-cert.
Preparing to unpack .../9-ssl-cert_1.1.2ubuntu1_all.deb ...
Unpacking ssl-cert (1.1.2ubuntu1) ...
Setting up ssl-cert (1.1.2ubuntu1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/ssl-cert.service → /usr/lib/systemd/system/ssl-cert.service.
Setting up libapr1t64:amd64 (1.7.2-3.1buildd1) ...
Setting up libaprutil1t64:amd64 (1.6.3-1.1ubuntu7) ...
Setting up apache2-data (2.4.58-1ubuntu4) ...
Setting up libaprutil1t64:amd64 (1.6.3-1.1ubuntu7) ...

```

```

ubuntu@ip-10-0-168:~$ sudo apt install php libapache2-mod-php-8.y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.3 php-common php8.3 php8.3-cli php8.3-common php8.3-opcache php8.3-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php8.3 php-common php8.3 php8.3-cli php8.3-common php8.3-opcache php8.3-readline
0 upgraded, 9 newly installed, 0 to remove and 139 not upgraded.
Need to get 4918 kB of archives.
After this operation, 22.4 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 php-common all 8.3.6-0ubuntu2 [13.9 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-common amd64 8.3.6-0ubuntu2.04.1 [739 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-opcache amd64 8.3.6-0ubuntu2.04.04.1 [372 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-readline amd64 8.3.6-0ubuntu2.04.04.1 [13.5 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3-cli amd64 8.3.6-0ubuntu2.04.04.1 [1914 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapache2-mod-php8.3 amd64 8.3.6-0ubuntu2.04.04.1 [1849 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libapache2-mod-php all 2.8.3+93ubuntu2 [4224 B]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 php8.3 all 8.3.6-0ubuntu2.04.04.1 [9174 B]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 php all 2.8.3+93ubuntu2 [4076 B]
Fetched 4918 kB in 8s (57.4 MB/s)
Selecting previously unselected package php-common.
(Reading database ... 68646 files and directories currently installed.)
Preparing to unpack .../0-php-common-2x3a93ubuntu2_all.deb ...
Unpacking php-common (2:93ubuntu2) ...
Selecting previously unselected package php8.3-common.
Preparing to unpack .../1-php8.3-common-8.3.6-0ubuntu2.04.04.1_amd64.deb ...
Unpacking php8.3-common (8.3.6-0ubuntu2.04.04.1) ...
Selecting previously unselected package php8.3-opcache.
Preparing to unpack .../2-php8.3-opcache-8.3.6-0ubuntu2.04.04.1_amd64.deb ...
Unpacking php8.3-opcache (8.3.6-0ubuntu2.04.04.1) ...
Selecting previously unselected package php8.3-readline.
Preparing to unpack .../3-php8.3-readline-8.3.6-0ubuntu2.04.04.1_amd64.deb ...
Unpacking php8.3-readline (8.3.6-0ubuntu2.04.04.1) ...
Selecting previously unselected package php8.3-cli.
Preparing to unpack .../4-php8.3-cli-8.3.6-0ubuntu2.04.04.1_amd64.deb ...
Unpacking php8.3-cli (8.3.6-0ubuntu2.04.04.1) ...
Selecting previously unselected package libapache2-mod-php8.3.
Preparing to unpack .../5-libapache2-mod-php8.3-8.3.6-0ubuntu2.04.04.1_amd64.deb ...
Unpacking libapache2-mod-php8.3 (8.3.6-0ubuntu2.04.04.1) ...
Selecting previously unselected package libapache2-mod-php.
Preparing to unpack .../6-libapache2-mod-php-2x3a93ubuntu2_all.deb ...
Unpacking libapache2-mod-php (2:8.3+93ubuntu2) ...
Selecting previously unselected package php.
Preparing to unpack .../7-php-2x3a93-8.3.6-0ubuntu2.04.04.1_all.deb ...
Unpacking php (2:8.3+93ubuntu2) ...
Setting up php-common (2:93ubuntu2) ...
created symlink /etc/systemd/system/timers.target.wants/phpsessionclean.timer + /usr/lib/systemd/system/phpsessionclean.timer.
Setting up php8.3-common (8.3.6-0ubuntu2.04.04.1) ...
Creating config file /etc/php/8.3/mods-available/calendar.ini with new version
Creating config file /etc/php/8.3/mods-available/ctype.ini with new version
Creating config file /etc/php/8.3/mods-available/posix.ini with new version
Creating config file /etc/php/8.3/mods-available/fileinfo.ini with new version

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