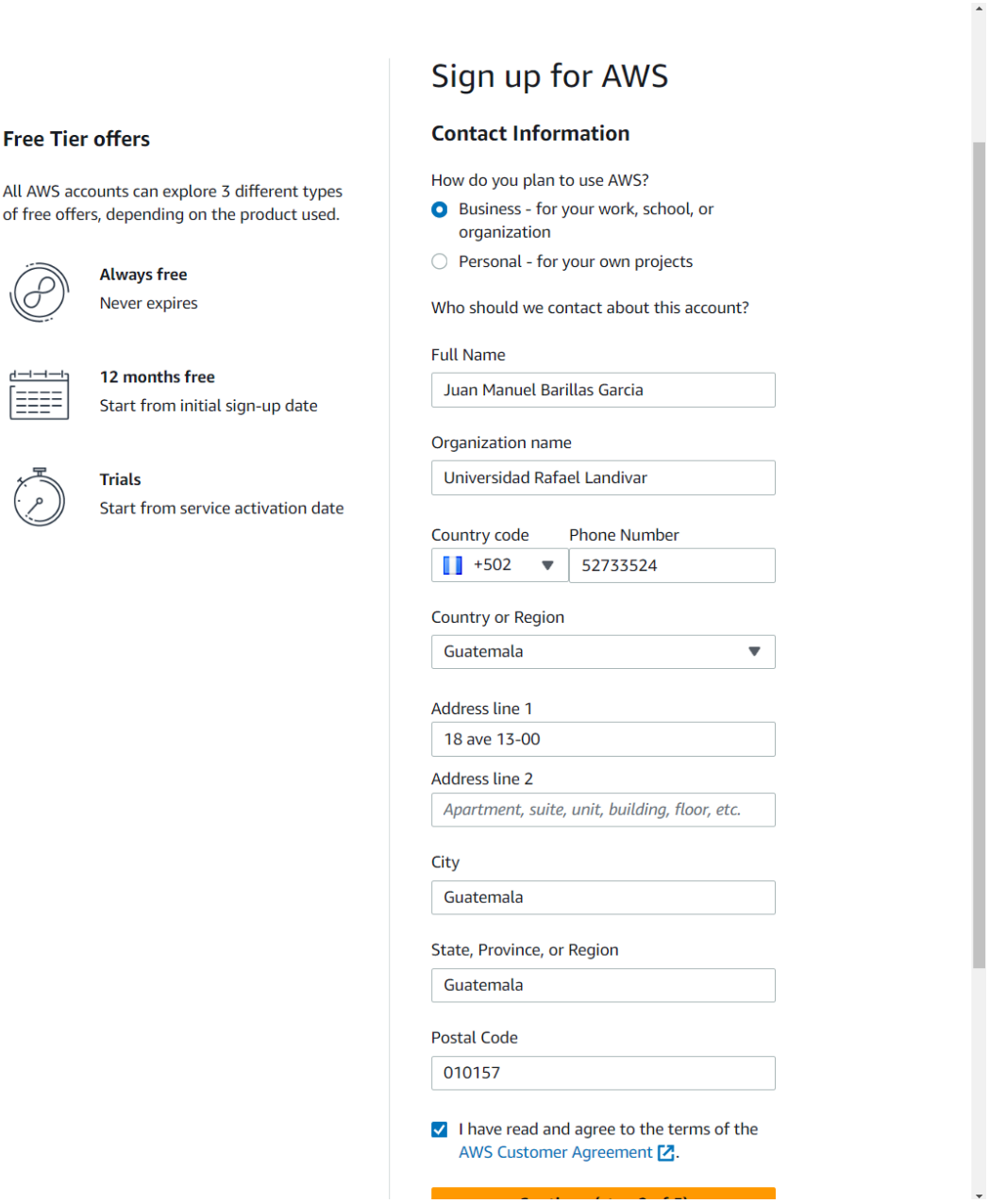
Universidad Rafael Landívar
Facultad de Ingeniería
Ingeniería Electrónica y Telecomunicaciones
Tecnologías de Virtualización y Data Centers
Lic. Juan Carlos Romero

CREACIÓN DE VM EN AMAZON AWS

Juan Manuel Barillas – 1334816

Guatemala, 23 de mayo del 2024

CREACIÓN DE LA CUENTA DE AWS:



Free Tier offers

All AWS accounts can explore 3 different types of free offers, depending on the product used.

Always free
Never expires

12 months free
Start from initial sign-up date

Trials
Start from service activation date

Sign up for AWS

Contact Information

How do you plan to use AWS?

- (•) Business - for your work, school, or organization
- ( ) Personal - for your own projects

Who should we contact about this account?

Full Name: Juan Manuel Barillas Garcia

Organization name: Universidad Rafael Landivar

Country code: +502 | Phone Number: 52733524

Country or Region: Guatemala

Address line 1: 18 ave 13-00

Address line 2: *Apartment, suite, unit, building, floor, etc.*

City: Guatemala

State, Province, or Region: Guatemala

Postal Code: 010157

[x] I have read and agree to the terms of the AWS Customer Agreement.

Congratulations !

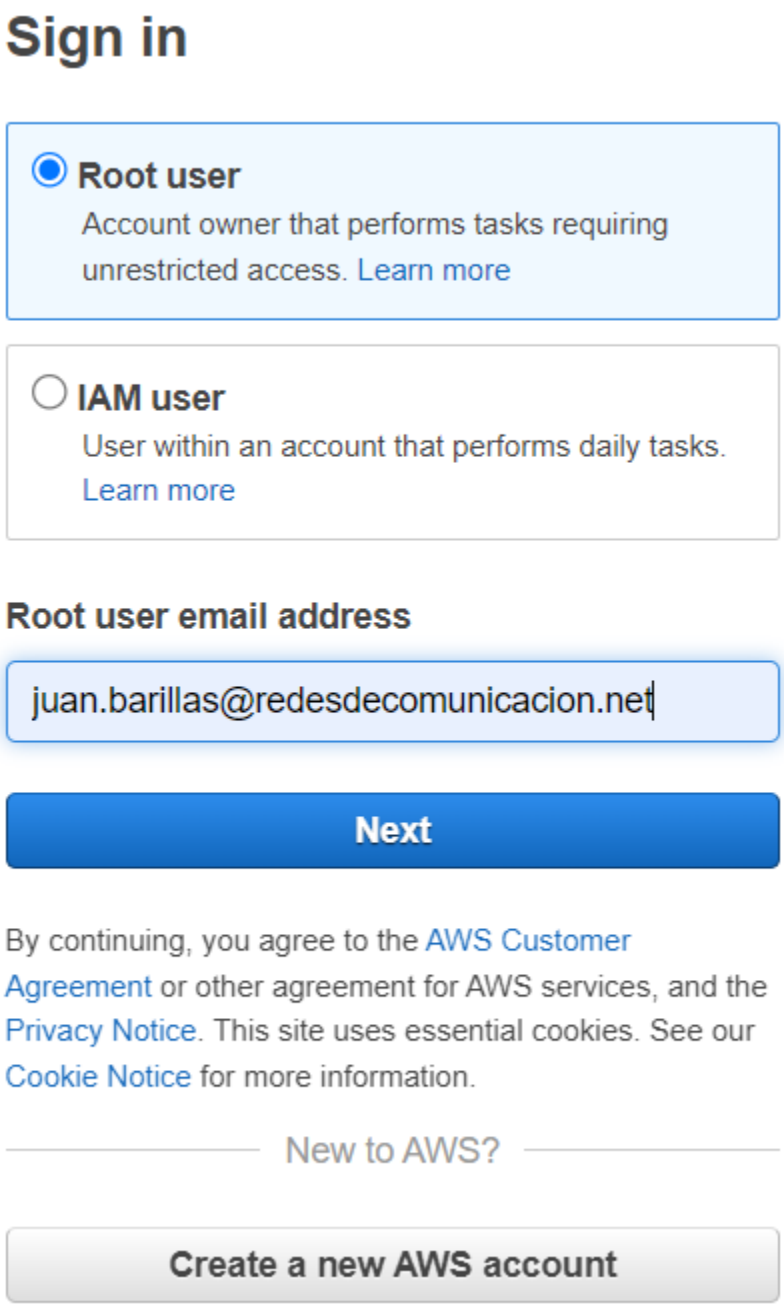
Thank you for signing up with AWS.

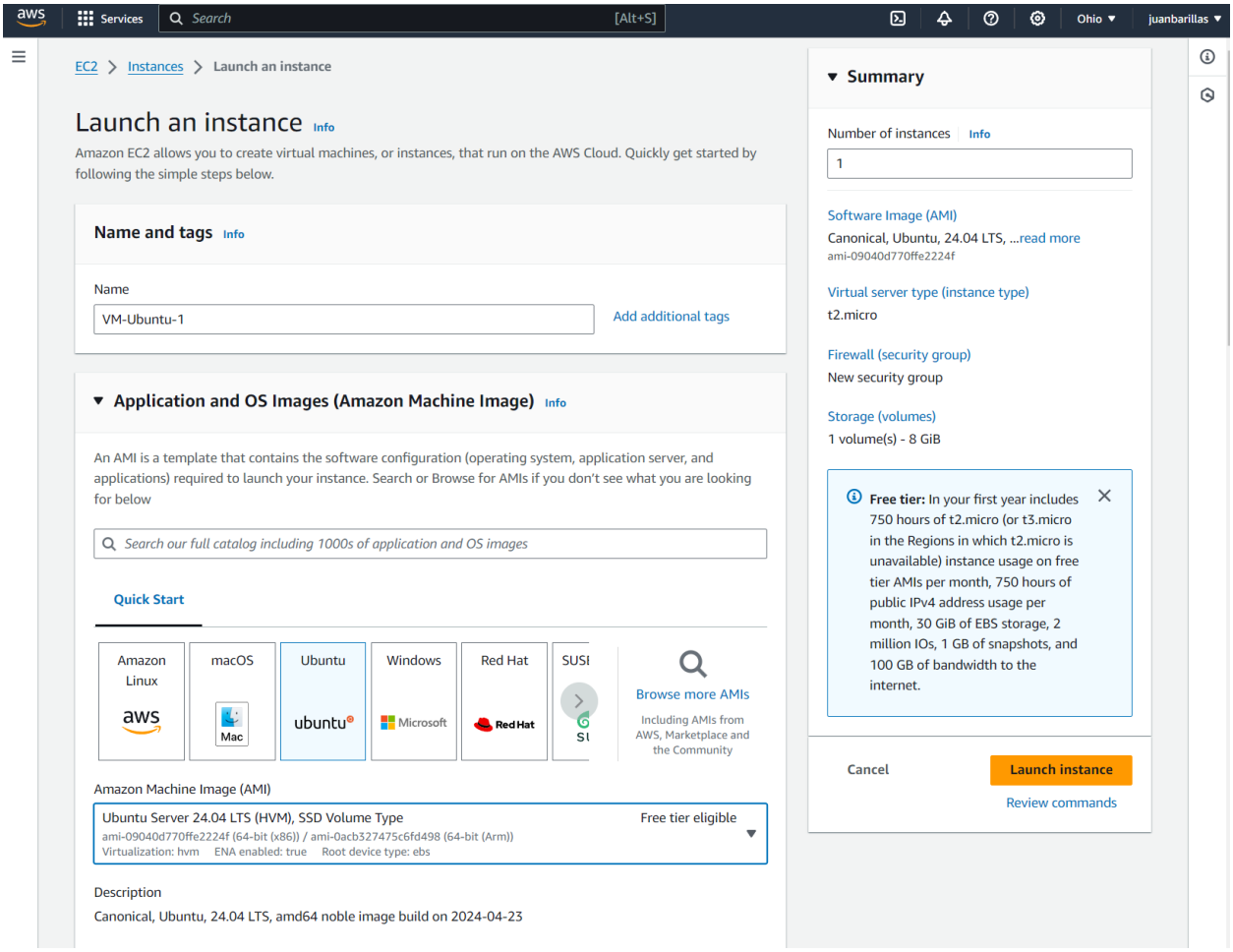
We are activating your account, which should take a few minutes. You will receive an email when this is complete.

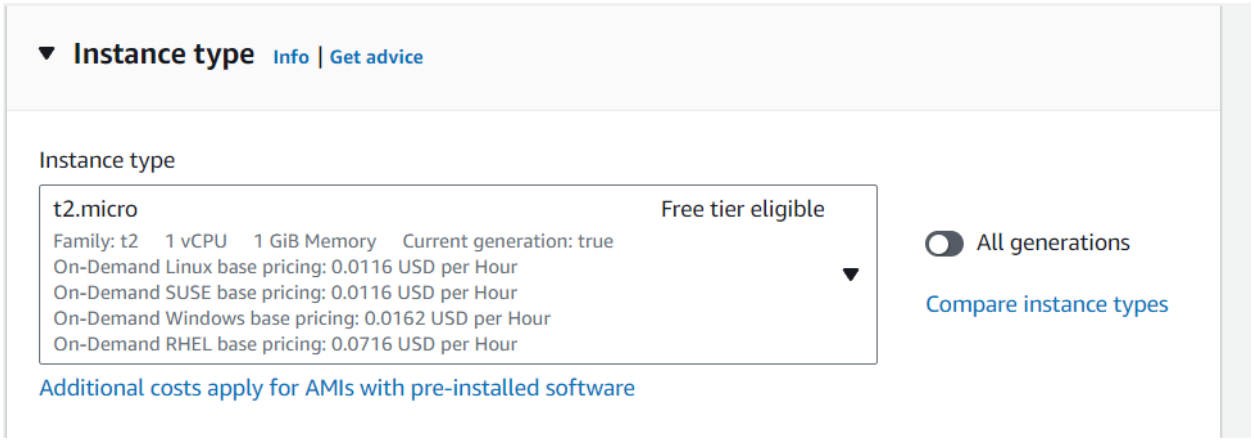
Go to the AWS Management Console

Sign up for another account **or** Contact Sales

CREACIÓN DE MÁQUINA VIRTUAL:




aws
Services
Search
[Alt+S]
Ohio
juanbarillas
EC2 > Instances > Launch an instance
Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
VM-Ubuntu-1
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Quick Start
Amazon Linux
macOS
Ubuntu
Windows
Red Hat
SUSI
Browse more AMIs
Including AMIs from AWS, Marketplace and the Community
Amazon Machine Image (AMI)
Ubuntu Server 24.04 LTS (HVM), SSD Volume Type
Free tier eligible
ami-09040d770ffe2224f (64-bit (x86)) / ami-0acb327475c6fd498 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs
Description
Canonical, Ubuntu, 24.04 LTS, amd64 noble image build on 2024-04-23
Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 24.04 LTS, ...read more
ami-09040d770ffe2224f
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.
Cancel
Launch instance
Review commands


Instance type Info | Get advice
Instance type
t2.micro
Free tier eligible
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Linux base pricing: 0.0116 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
All generations
Compare instance types
Additional costs apply for AMIs with pre-installed software

Network settings Info

Edit

Network Info

vpc-04b3b764448996e40

Subnet Info

No preference (Default subnet in any availability zone)

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

- (•) Create security group
- ( ) Select existing security group

We'll create a new security group called '**launch-wizard-1**' with the following rules:

- [x] Allow SSH traffic from
  Helps you connect to your instance
  Anywhere
  0.0.0.0/0
- [x] Allow HTTPS traffic from the internet
  To set up an endpoint, for example when creating a web server
- [x] Allow HTTP traffic from the internet
  To set up an endpoint, for example when creating a web server

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

Configure storage Info

Advanced

1x 20 GiB gp2 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems Edit

Summary

Number of instances | Info

1

Software Image (AMI)

Canonical, Ubuntu, 24.04 LTS, ...read more

ami-09040d770ffe2224f

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 20 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Launch instance

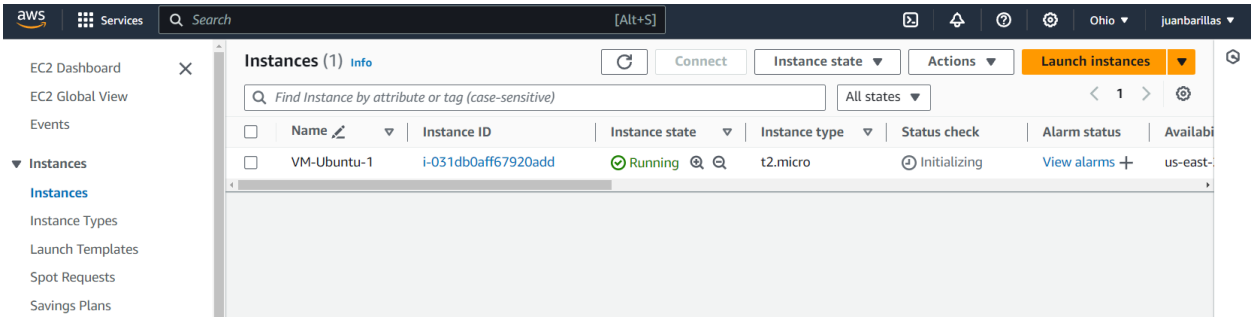
Review commands

EC2 > Instances > Launch an instance

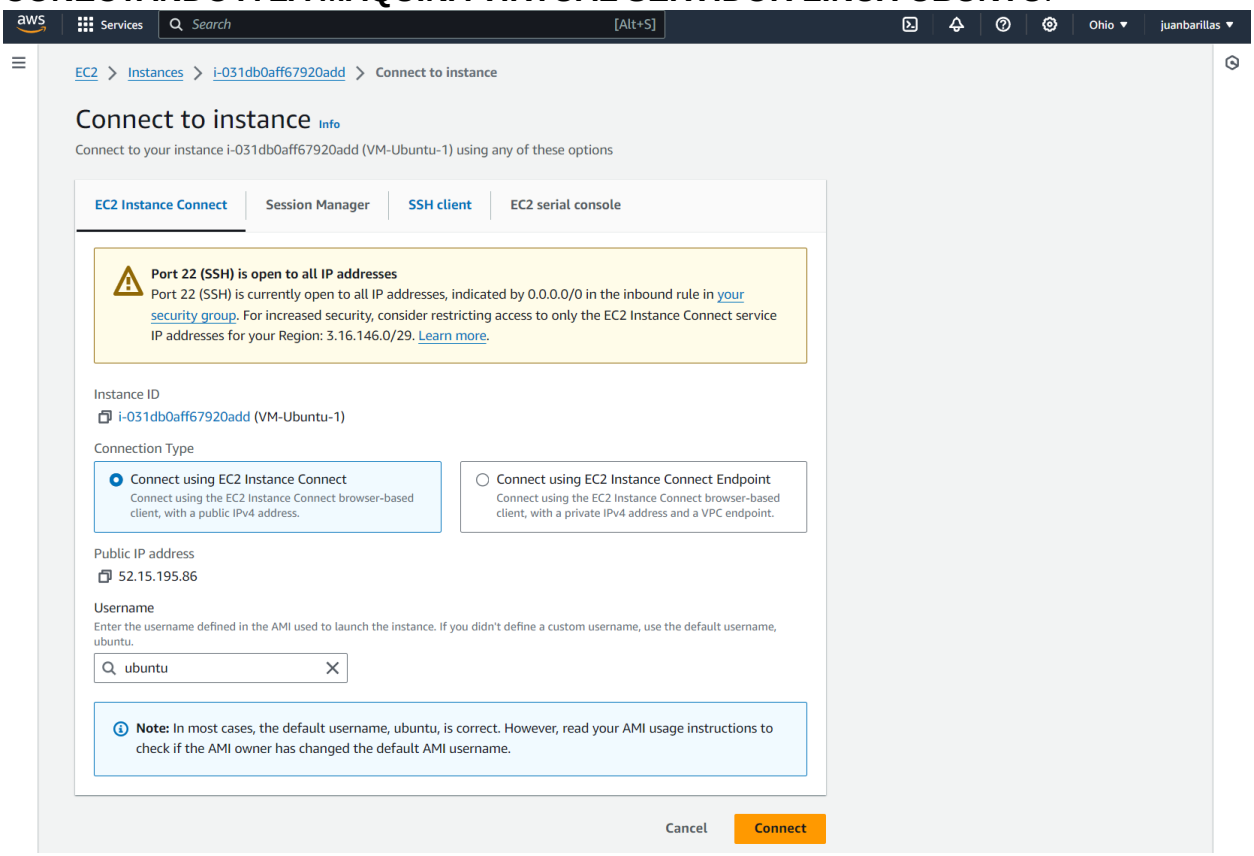
Success
Successfully initiated launch of instance (i-031db0aff67920add)

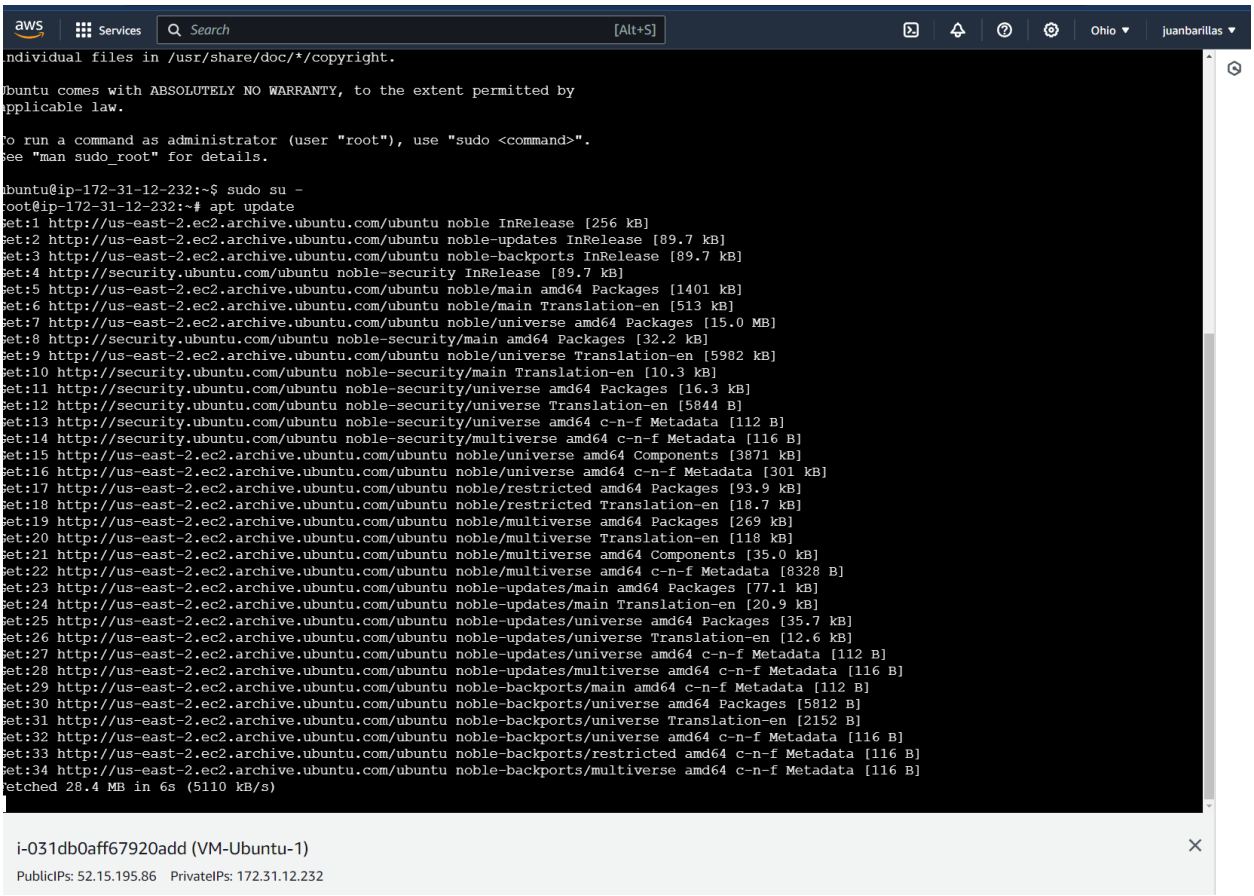
▼ Launch log

Initializing requests	Succeeded
Creating security groups	Succeeded
Creating security group rules	Succeeded
Launch initiation	Succeeded



CONECTANDO A LA MÁQUINA VIRTUAL SERVIDOR LINUX-UBUNTU:

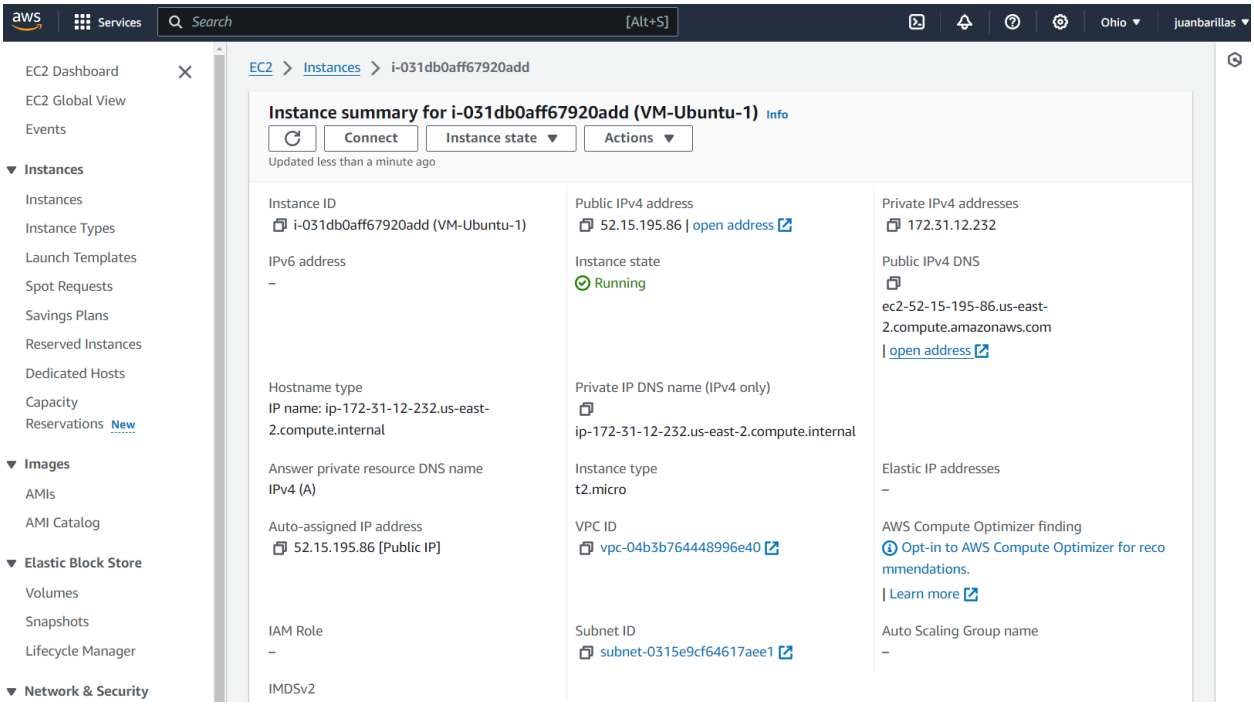



aws
Services
Search
[Alt+S]
Ohio
juanbarillas
ndividual files in /usr/share/doc/*/copyright.
buntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
pplicable law.
o run a command as administrator (user "root"), use "sudo <command>".
ee "man sudo_root" for details.
buntu@ip-172-31-12-232:~$ sudo su -
oot@ip-172-31-12-232:~# apt update
et:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble InRelease [256 kB]
et:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [89.7 kB]
et:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [89.7 kB]
et:4 http://security.ubuntu.com/ubuntu noble-security InRelease [89.7 kB]
et:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 Packages [1401 kB]
et:6 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/main Translation-en [513 kB]
et:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
et:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [32.2 kB]
et:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
et:10 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [10.3 kB]
et:11 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [16.3 kB]
et:12 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [5844 B]
et:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [112 B]
et:14 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [116 B]
et:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
et:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
et:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/restricted amd64 Packages [93.9 kB]
et:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/restricted Translation-en [18.7 kB]
et:19 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
et:20 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
et:21 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
et:22 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
et:23 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [77.1 kB]
et:24 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [20.9 kB]
et:25 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [35.7 kB]
et:26 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [12.6 kB]
et:27 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [112 B]
et:28 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [116 B]
et:29 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
et:30 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [5812 B]
et:31 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [2152 B]
et:32 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [116 B]
et:33 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
et:34 http://us-east-2.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
etched 28.4 MB in 6s (5110 kB/s)
i-031db0aff67920add (VM-Ubuntu-1)
PublicIPs: 52.15.195.86 PrivateIPs: 172.31.12.232

INSTALANDO EL SERVIDOR APACHE2:

```
Setting up apache2-utils (2.4.58-1ubuntu8.1) ...
Setting up apache2-bin (2.4.58-1ubuntu8.1) ...
Setting up apache2 (2.4.58-1ubuntu8.1) ...
Enabling module mpm_event.
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module auth_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-12-232:~#
```

DIRECCION IPv4 PUBLICA



VERIFICANDO QUE SIRVA EL SERVIDOR APACHE2: