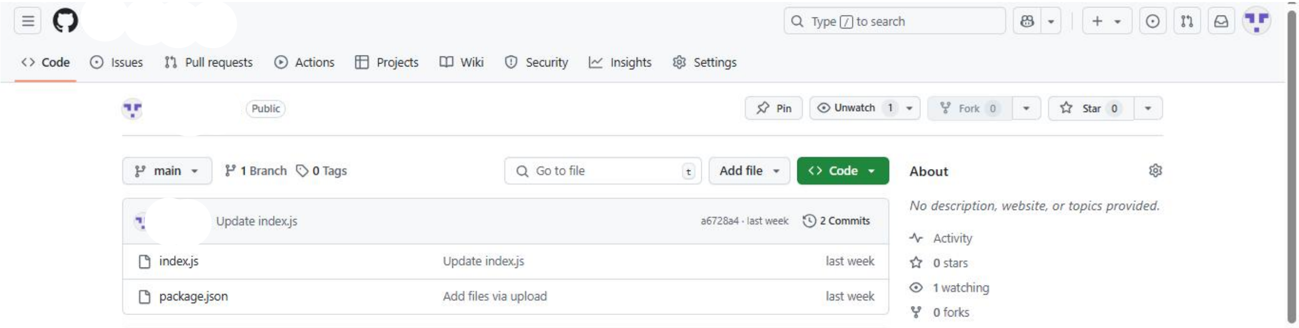
Assignment : 9

Deploy a project from GitHub to EC2.

Step 1: Ensure that there is a repository with files needed to host a site example: “index.js” , “package.json”.



No description, website, or topics provided.

Activity

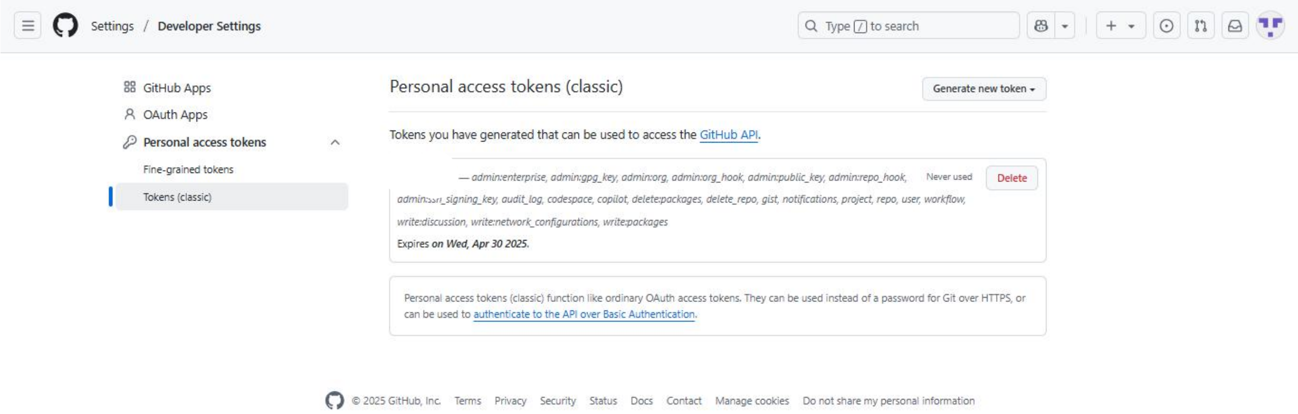
0 stars

1 watching

0 forks

Update index.js	a6728a4 · last week	2 Commits
index.js	Update index.js	last week
package.json	Add files via upload	last week

Step 2: Go to Setting/Developer Setting and generate a **Personal access tokens (classic)** then copy the token to a safe note as it will not be allowed to be copied again.



Personal access tokens (classic)

Tokens you have generated that can be used to access the GitHub API.

— admin:enterprise, admin:gpg_key, admin:org, admin:org_hook, admin:public_key, admin:repo_hook, admin:ssh_signing_key, audit_log, codespace, copilot, delete:packages, delete_repo, gist, notifications, project, repo, user, workflow, write:discussion, write:network_configurations, write:packages — Never used

Expires on Wed, Apr 30 2025.

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to authenticate to the API over Basic Authentication.

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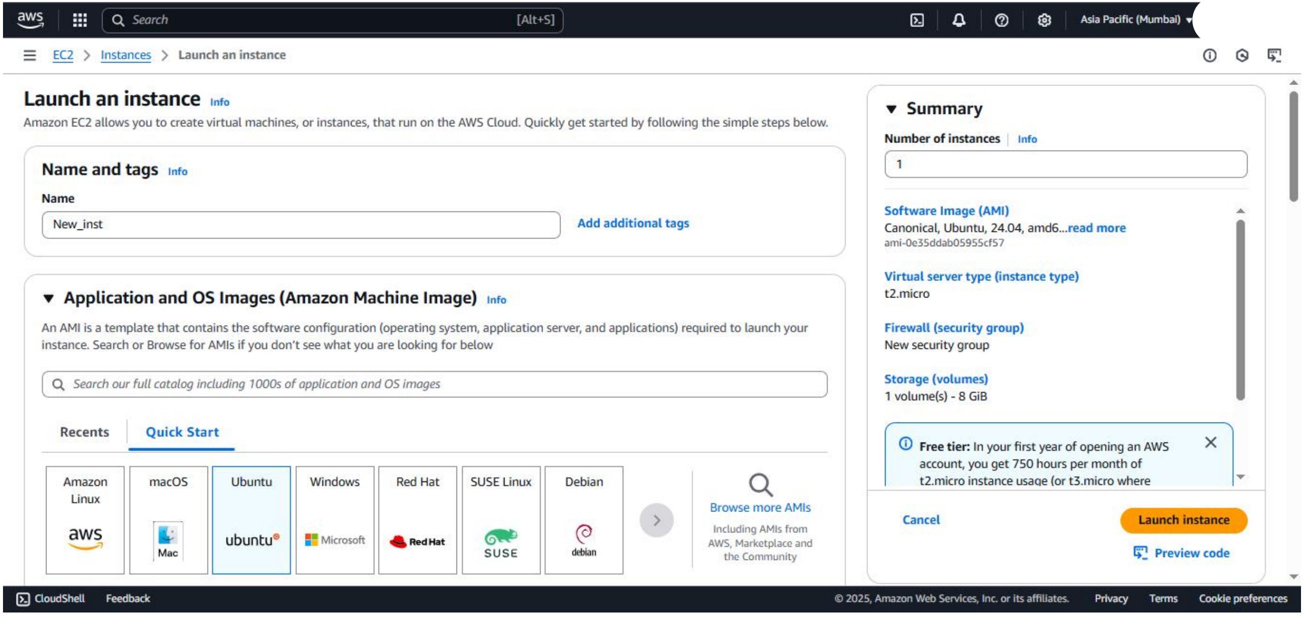
Step 3: Now we create a new EC2 instance and copy the IP.



Launch an instance

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

Name: New_inst

Application and OS Images (Amazon Machine Image)

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

Summary

Number of instances: 1

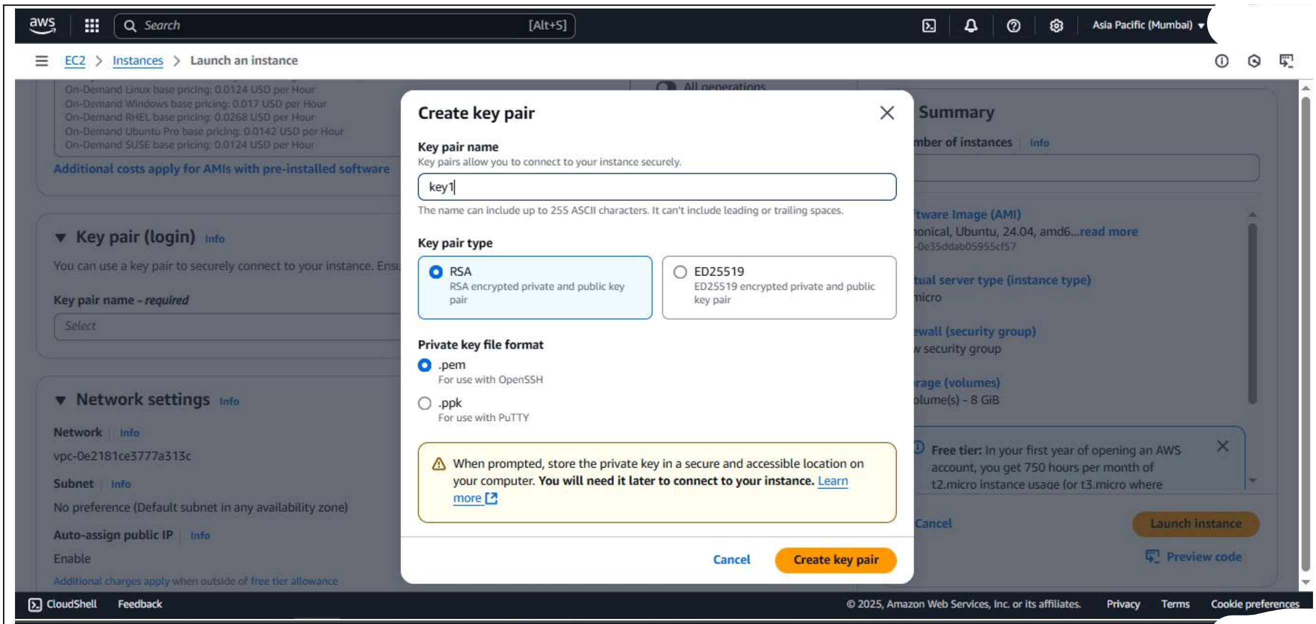
Software Image (AMI): Canonical, Ubuntu, 24.04, amd6...read more ami-0e35ddab05955cf57

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 of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where


aws
Search [Alt+S]
Asia Pacific (Mumbai) ▾
EC2 > Instances > Launch an instance
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

On-Demand Linux base pricing: 0.0124 USD per Hour
On-Demand Windows base pricing: 0.017 USD per Hour
On-Demand RHEL base pricing: 0.0268 USD per Hour
On-Demand Ubuntu Pro base pricing: 0.0142 USD per Hour
On-Demand SUSE base pricing: 0.0124 USD per Hour

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensu

Key pair name - *required*

Select

▼ Network settings Info

Network Info

vpc-0e2181ce3777a313c

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

Create key pair

Key pair name

Key pairs allow you to connect to your instance securely.

key1

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

● RSA
RSA encrypted private and public key pair

○ ED25519
ED25519 encrypted private and public key pair

Private key file format

● .pem
For use with OpenSSH

○ .ppk
For use with PuTTY

⚠ When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** Learn more

Cancel | Create key pair

Summary

mber of instances Info

tware Image (AMI)
nonical, Ubuntu, 24.04, amd6...read more
-0e35ddab05955cf57

tual server type (instance type)
micro

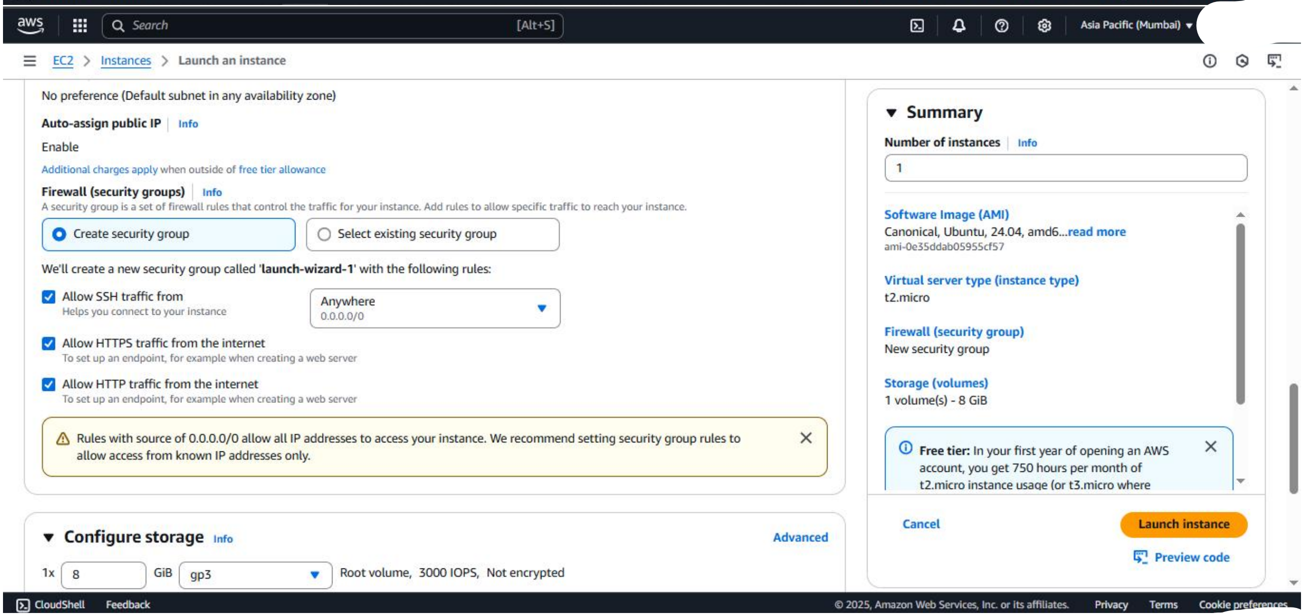
ewall (security group)
w security group

rage (volumes)
olume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where

Cancel | Launch instance

Preview code


aws
Search [Alt+S]
Asia Pacific (Mumbai) ▾
EC2 > Instances > Launch an instance
CloudShell
Feedback
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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:

☑ Allow SSH traffic from
Helps you connect to your instance
Anywhere
0.0.0.0/0

☑ Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server

☑ 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 8 GiB gp3 Root volume, 3000 IOPS, Not encrypted

▼ **Summary**

Number of instances Info

1

Software Image (AMI)
Canonical, Ubuntu, 24.04, amd6...read more
ami-0e35ddab05955cf57

Virtual server type (instance type)
t2.micro

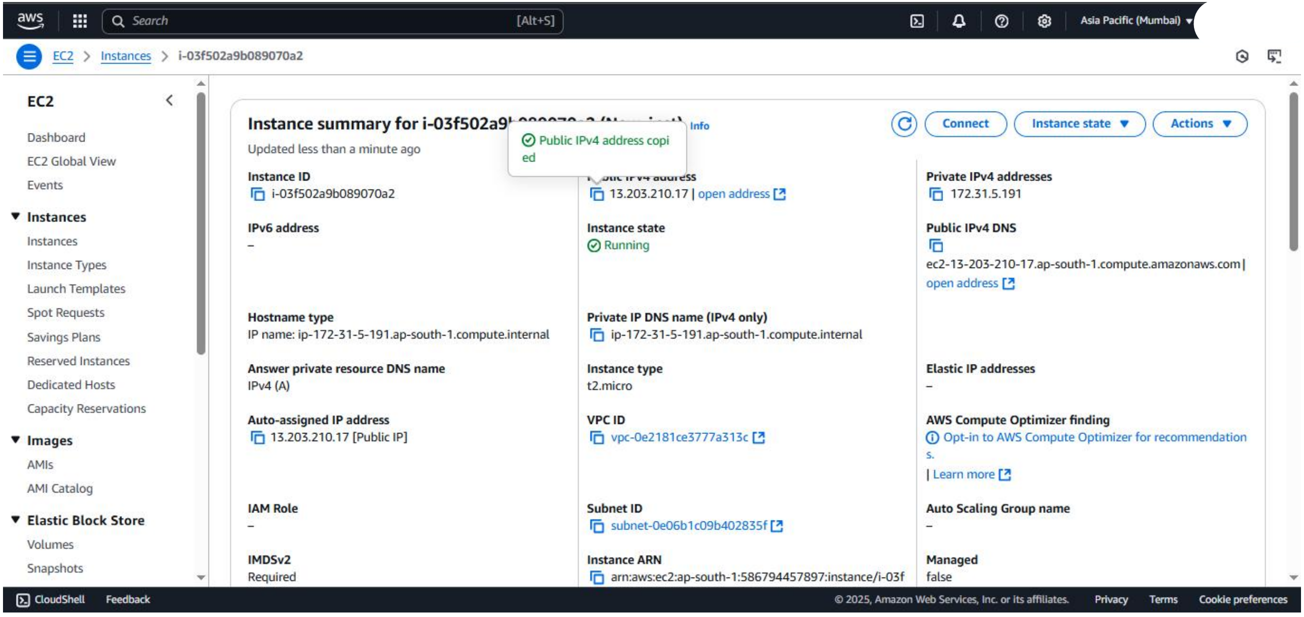
Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where

Cancel | Launch instance

Preview code



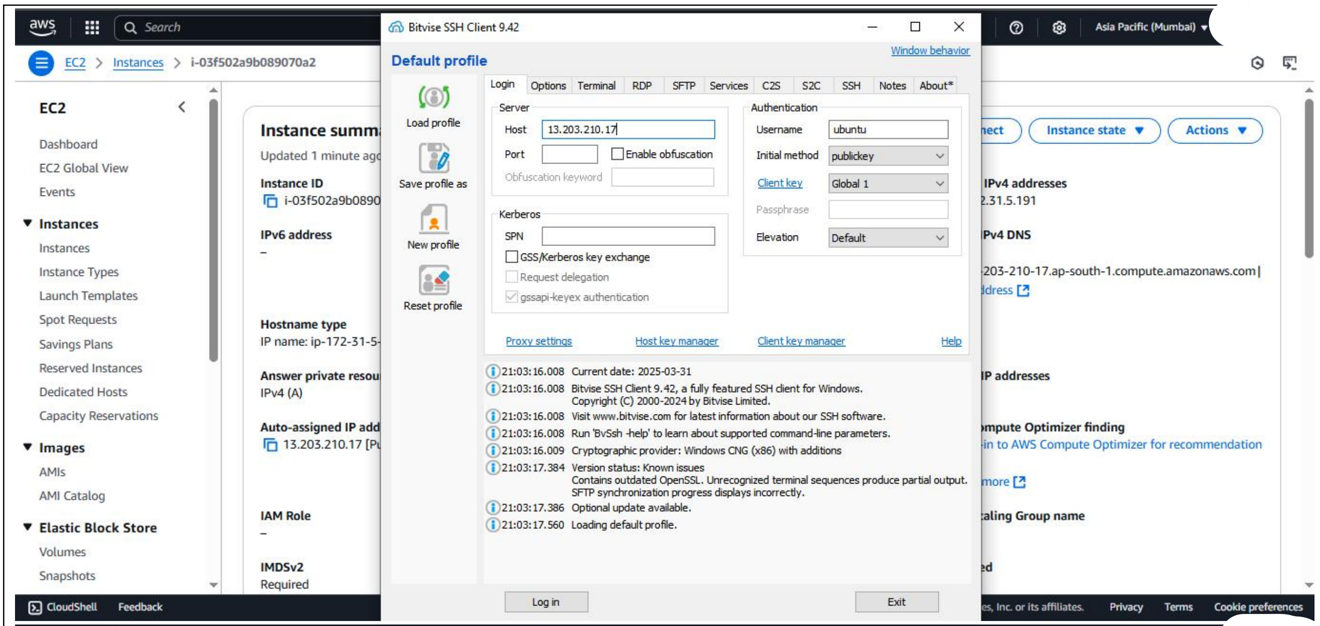
Instance summary for i-03f502a9b089070a2 (Name: ...) Info

✓ Public IPv4 address copied

Updated less than a minute ago

Instance ID i-03f502a9b089070a2	**Public IPv4 address** 13.203.210.17 | open address	**Private IPv4 addresses** 172.31.5.191
IPv6 address –	**Instance state** Running	**Public IPv4 DNS** ec2-13-203-210-17.ap-south-1.compute.amazonaws.com | open address
Hostname type IP name: ip-172-31-5-191.ap-south-1.compute.internal	**Private IP DNS name (IPv4 only)** ip-172-31-5-191.ap-south-1.compute.internal	
Answer private resource DNS name IPv4 (A)	**Instance type** t2.micro	**Elastic IP addresses** –
Auto-assigned IP address 13.203.210.17 [Public IP]	**VPC ID** vpc-0e2181ce3777a313c	**AWS Compute Optimizer finding** Opt-in to AWS Compute Optimizer for recommendations. | Learn more
IAM Role –	**Subnet ID** subnet-0e06b1c09b402835f	**Auto Scaling Group name** –
IMDSv2 Required	**Instance ARN** arn:aws:ec2:ap-south-1:586794457897:instance/i-03f	**Managed** false

Step 4: Now open Bitvise SSH Client and copy the IP in Host then import the client key.



Default profile

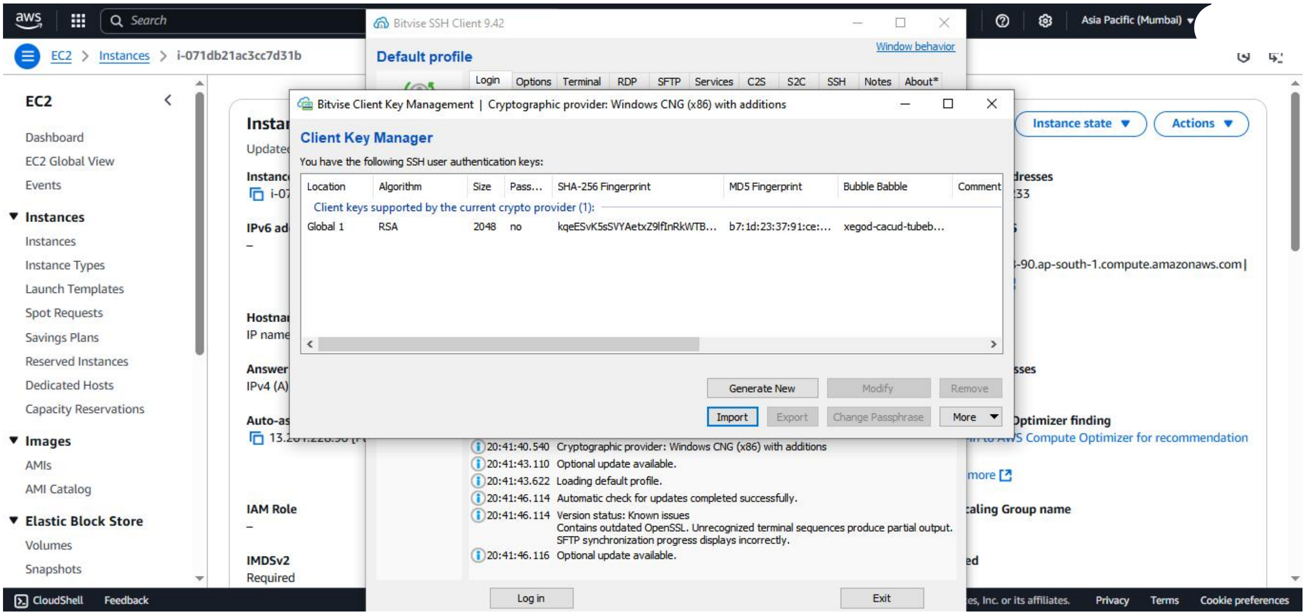
Server
Host: 13.203.210.17
Port: □ Enable obfuscation
Obfuscation keyword

Kerberos
SPN
□ GSS/Kerberos key exchange
□ Request delegation
☑ gssapi-keyex authentication

Authentication
Username: ubuntu
Initial method: publickey
Client key: Global 1
Passphrase
Elevation: Default

```
21:03:16.008 Current date: 2025-03-31
21:03:16.008 Bitvise SSH Client 9.42, a fully featured SSH client for Windows.
             Copyright (C) 2000-2024 by Bitvise Limited.
21:03:16.008 Visit www.bitvise.com for latest information about our SSH software.
21:03:16.008 Run 'BvSsh -help' to learn about supported command-line parameters.
21:03:16.009 Cryptographic provider: Windows CNG (x86) with additions
21:03:17.384 Version status: Known issues
             Contains outdated OpenSSL. Unrecognized terminal sequences produce partial output.
             SFTP synchronization progress displays incorrectly.
21:03:17.386 Optional update available.
21:03:17.560 Loading default profile.
```

Instance summary
Updated 1 minute ago
Instance ID: i-03f502a9b0890
IPv6 address: –
Hostname type: IP name: ip-172-31-5
Answer private resource DNS name: IPv4 (A)
Auto-assigned IP address: 13.203.210.17 [Pu
IAM Role: –
IMDSv2: Required
IPv4 addresses: .31.5.191
IPv4 DNS: 203-210-17.ap-south-1.compute.amazonaws.com
IP addresses
Compute Optimizer finding: in to AWS Compute Optimizer for recommendation
Auto Scaling Group name



Default profile

Bitvise Client Key Management | Cryptographic provider: Windows CNG (x86) with additions

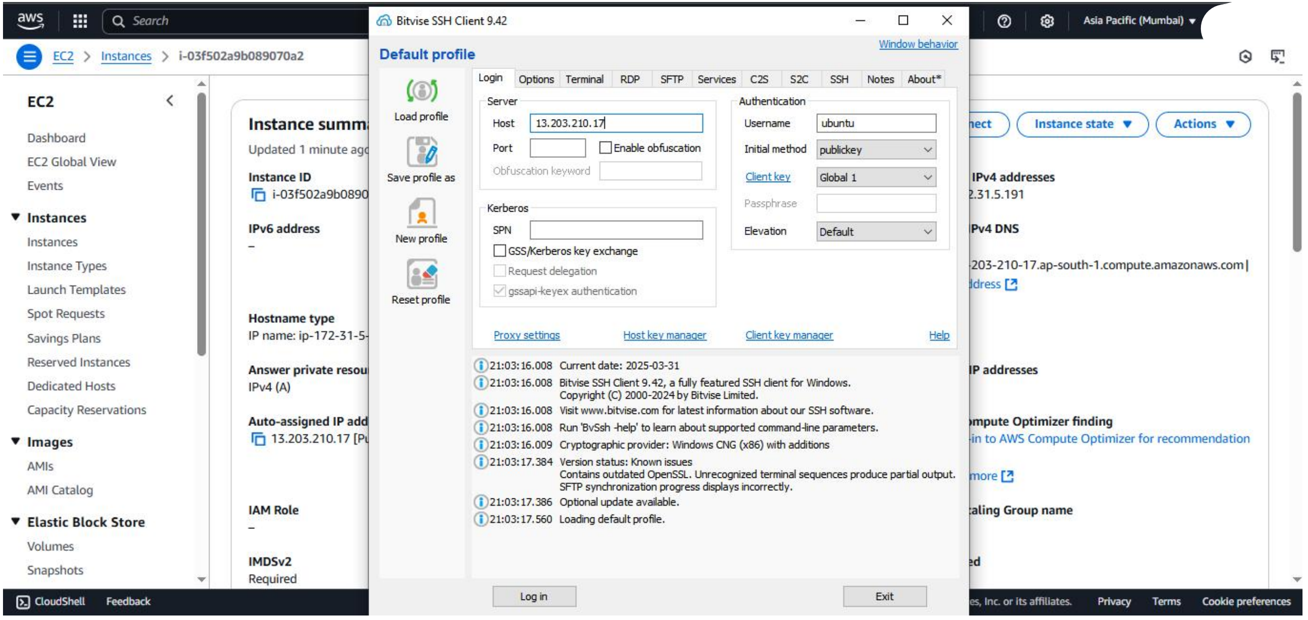
Client Key Manager

You have the following SSH user authentication keys:

Location	Algorithm	Size	Pass...	SHA-256 Fingerprint	MD5 Fingerprint	Bubble Babble	Comment
Client keys supported by the current crypto provider (1):							
Global 1	RSA	2048	no	kqeESvK5sSVYAetxZ9lfInRkWTB...	b7:1d:23:37:91:ce:...	xegod-cacud-tubeb...	

```
20:41:40.540 Cryptographic provider: Windows CNG (x86) with additions
20:41:43.110 Optional update available.
20:41:43.622 Loading default profile.
20:41:46.114 Automatic check for updates completed successfully.
20:41:46.114 Version status: Known issues
             Contains outdated OpenSSL. Unrecognized terminal sequences produce partial output.
             SFTP synchronization progress displays incorrectly.
20:41:46.116 Optional update available.
```

Step 5: After importing client key give username as “ubuntu” and log in.



Default profile

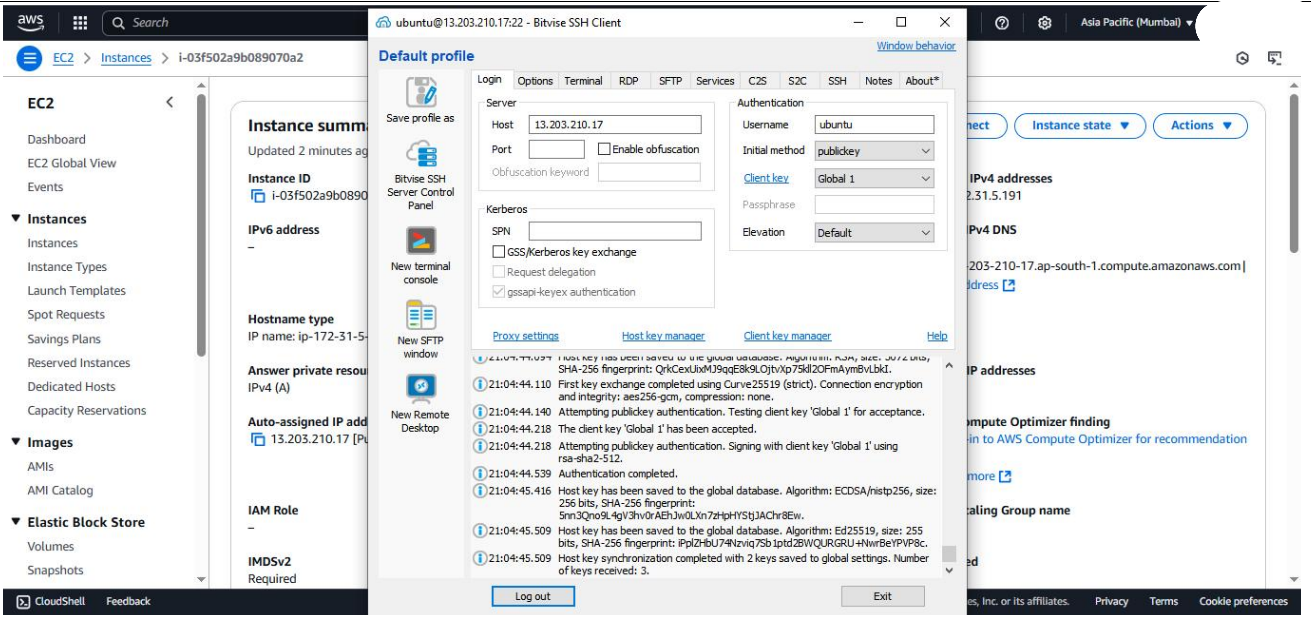
Server
Host: 13.203.210.17
Port: □ Enable obfuscation
Obfuscation keyword

Kerberos
SPN
□ GSS/Kerberos key exchange
□ Request delegation
☑ gssapi-keyex authentication

Authentication
Username: ubuntu
Initial method: publickey
Client key: Global 1
Passphrase
Elevation: Default

```
21:03:16.008 Current date: 2025-03-31
21:03:16.008 Bitvise SSH Client 9.42, a fully featured SSH client for Windows.
             Copyright (C) 2000-2024 by Bitvise Limited.
21:03:16.008 Visit www.bitvise.com for latest information about our SSH software.
21:03:16.008 Run 'BvSsh -help' to learn about supported command-line parameters.
21:03:16.009 Cryptographic provider: Windows CNG (x86) with additions
21:03:17.384 Version status: Known issues
             Contains outdated OpenSSL. Unrecognized terminal sequences produce partial output.
             SFTP synchronization progress displays incorrectly.
21:03:17.386 Optional update available.
21:03:17.560 Loading default profile.
```

Instance summary
Updated 1 minute ago
Instance ID: i-03f502a9b0890
IPv6 address: –
Hostname type: IP name: ip-172-31-5
Answer private resource DNS name: IPv4 (A)
Auto-assigned IP address: 13.203.210.17 [Pu
IAM Role: –
IMDSv2: Required
IPv4 addresses: .31.5.191
IPv4 DNS: 203-210-17.ap-south-1.compute.amazonaws.com
IP addresses
Compute Optimizer finding: in to AWS Compute Optimizer for recommendation
Auto Scaling Group name



Server

Host: 13.203.210.17

Port:

□ Enable obfuscation

Obfuscation keyword:

Kerberos

SPN:

□ GSS/Kerberos key exchange

□ Request delegation

☑ gssapi-keyex authentication

Authentication

Username: ubuntu

Initial method: publickey

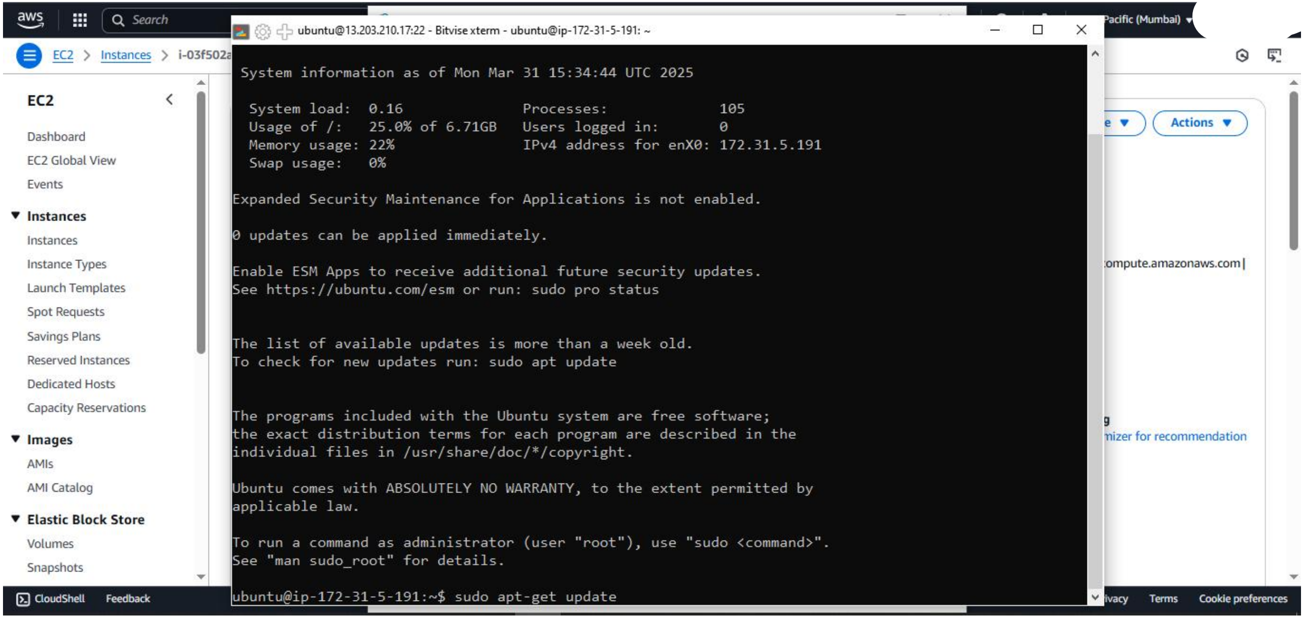
Client key: Global 1

Passphrase:

Elevation: Default

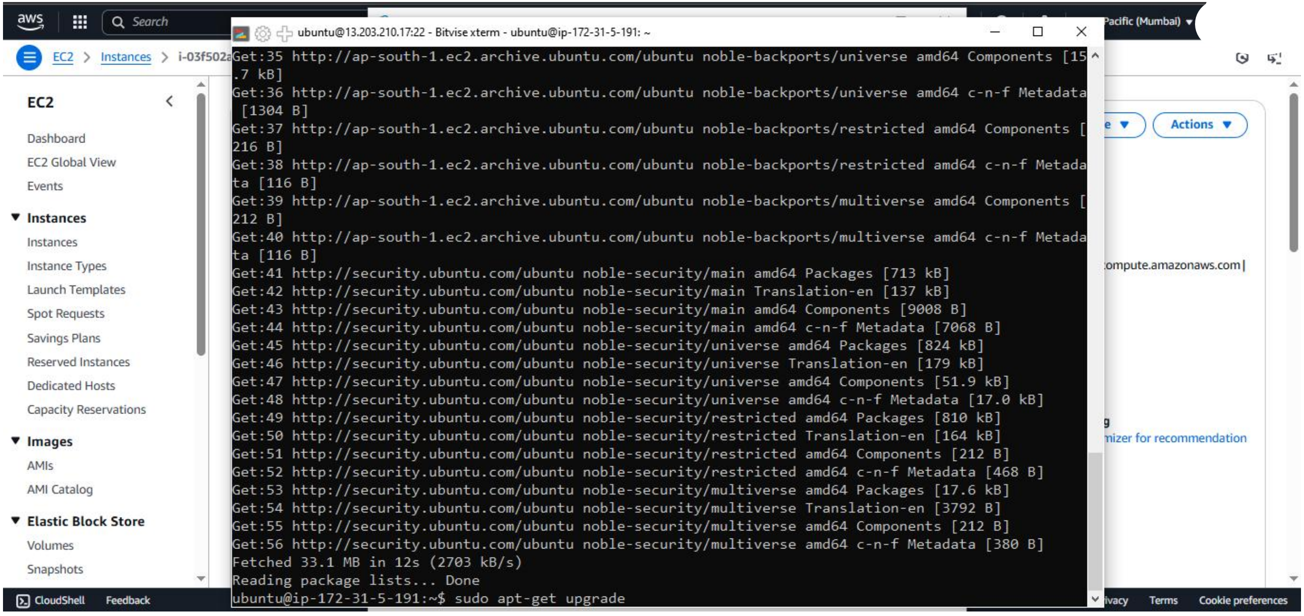
```
21:04:44.094 Host key has been saved to the global database. Algorithm: RSA, size: 3072 bits,
             SHA-256 fingerprint: QrkCexUixMJ9qqE8k9LOjtvXp75kll2OFmAymBvLbkI.
21:04:44.110 First key exchange completed using Curve25519 (strict). Connection encryption
             and integrity: aes256-gcm, compression: none.
21:04:44.140 Attempting publickey authentication. Testing client key 'Global 1' for acceptance.
21:04:44.218 The client key 'Global 1' has been accepted.
21:04:44.218 Attempting publickey authentication. Signing with client key 'Global 1' using
             rsa-sha2-512.
21:04:44.539 Authentication completed.
21:04:45.416 Host key has been saved to the global database. Algorithm: ECDSA/nistp256, size:
             256 bits, SHA-256 fingerprint:
             5nn3Qno9L4gV3hv0rAEhJw0LXn7zHpHYStjJAChr8Ew.
21:04:45.509 Host key has been saved to the global database. Algorithm: Ed25519, size: 255
             bits, SHA-256 fingerprint: iPplZHbU74Nzviq7Sb1ptd2BWQURGRU+NwrBeYPVP8c.
21:04:45.509 Host key synchronization completed with 2 keys saved to global settings. Number
             of keys received: 3.
```

Step 6: Open the terminal console then use the command “sudo apt-get update”.



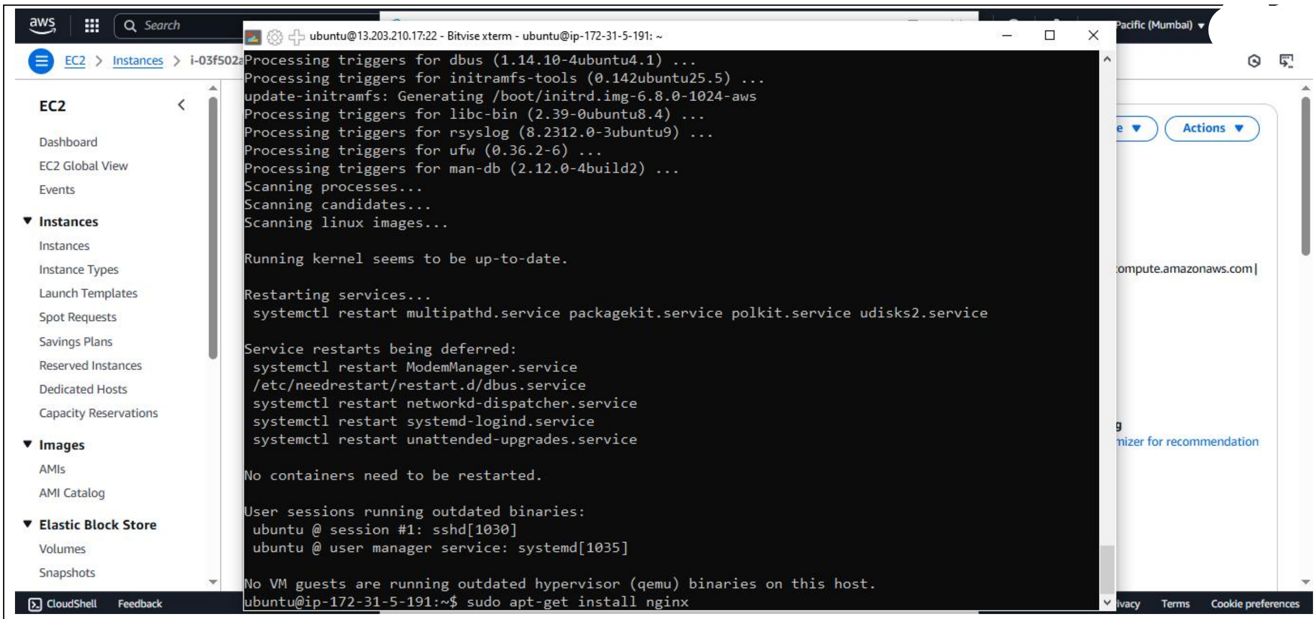
```
 System information as of Mon Mar 31 15:34:44 UTC 2025

  System load:  0.16              Processes:             105
  Usage of /:   25.0% of 6.71GB   Users logged in:       0
  Memory usage: 22%               IPv4 address for enX0: 172.31.5.191
  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-172-31-5-191:~$ sudo apt-get update
```

Step7: Now type the command “sudo apt-get upgrade”.



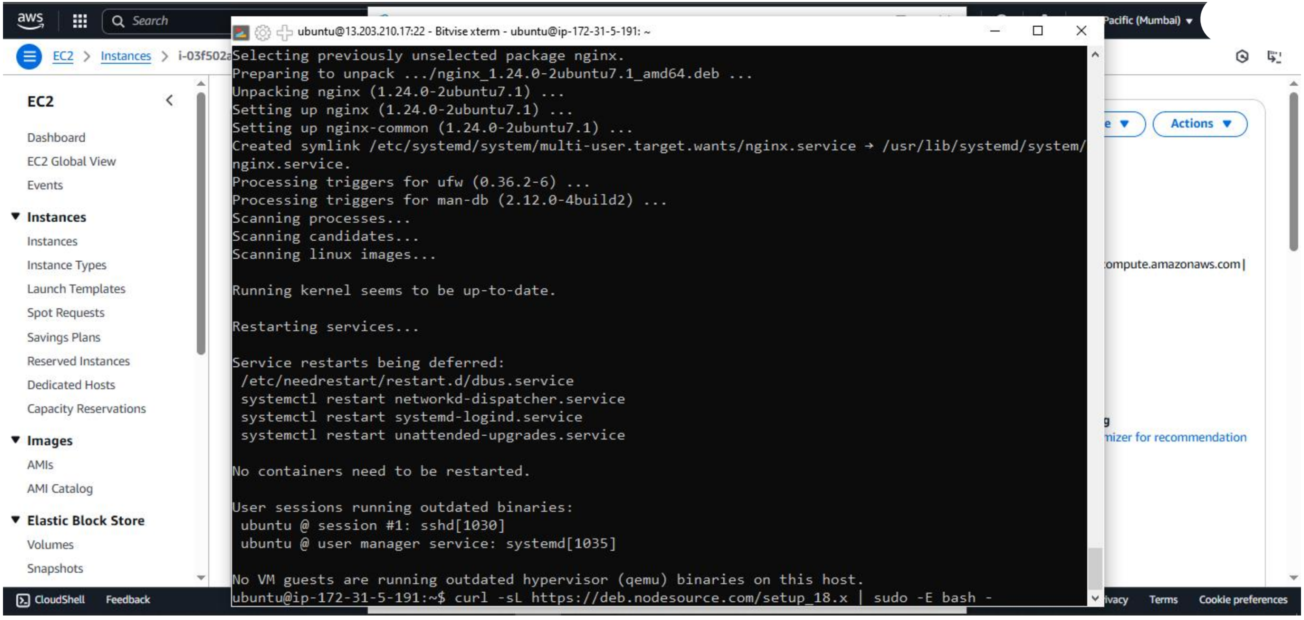
```
Get:35 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [15
.7 kB]
Get:36 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata
 [1304 B]
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [
216 B]
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metada
ta [116 B]
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [
212 B]
Get:40 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metada
ta [116 B]
Get:41 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [713 kB]
Get:42 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [137 kB]
Get:43 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [9008 B]
Get:44 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [7068 B]
Get:45 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [824 kB]
Get:46 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [179 kB]
Get:47 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [51.9 kB]
Get:48 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [17.0 kB]
Get:49 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [810 kB]
Get:50 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [164 kB]
Get:51 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:52 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [468 B]
Get:53 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [17.6 kB]
Get:54 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [3792 B]
Get:55 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:56 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [380 B]
Fetched 33.1 MB in 12s (2703 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-5-191:~$ sudo apt-get upgrade
```

Step 8: Now type the command “sudo apt-get install nginx”



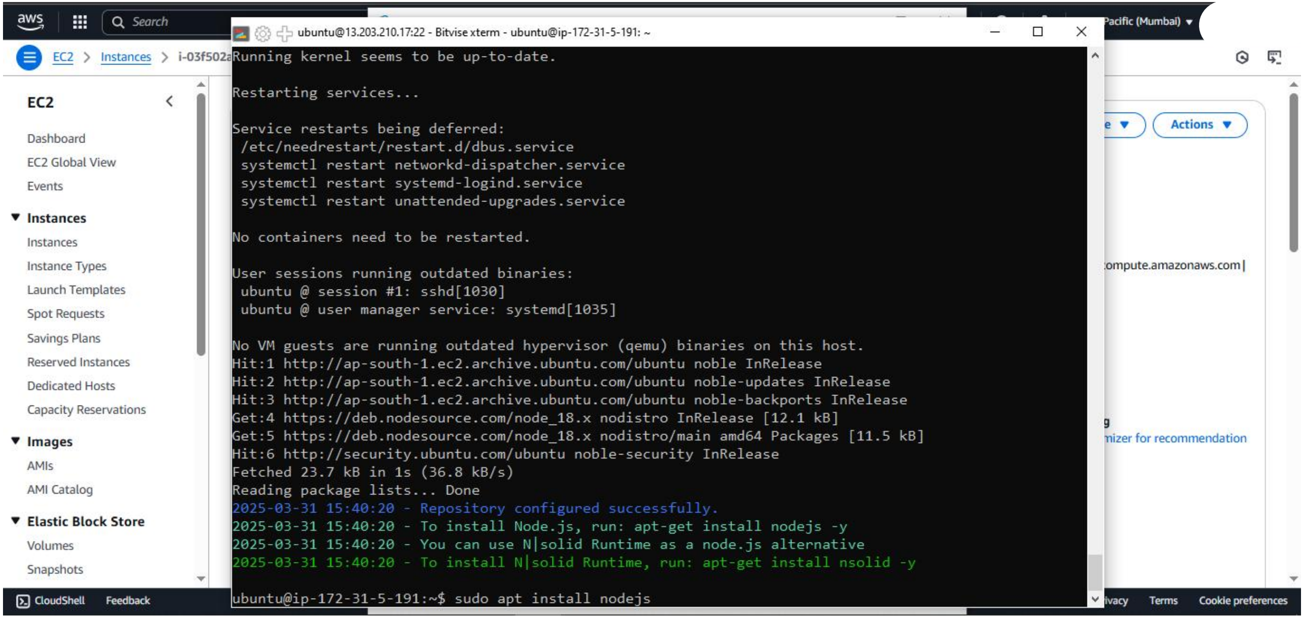
```
Processing triggers for dbus (1.14.10-4ubuntu4.1) ...
Processing triggers for initramfs-tools (0.142ubuntu25.5) ...
update-initramfs: Generating /boot/initrd.img-6.8.0-1024-aws
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
Processing triggers for rsyslog (8.2312.0-3ubuntu9) ...
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
 systemctl restart multipathd.service packagekit.service polkit.service udisks2.service

Service restarts being deferred:
 systemctl restart ModemManager.service
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-5-191:~$ sudo apt-get install nginx
```

Step 9: Now type the command “curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -”



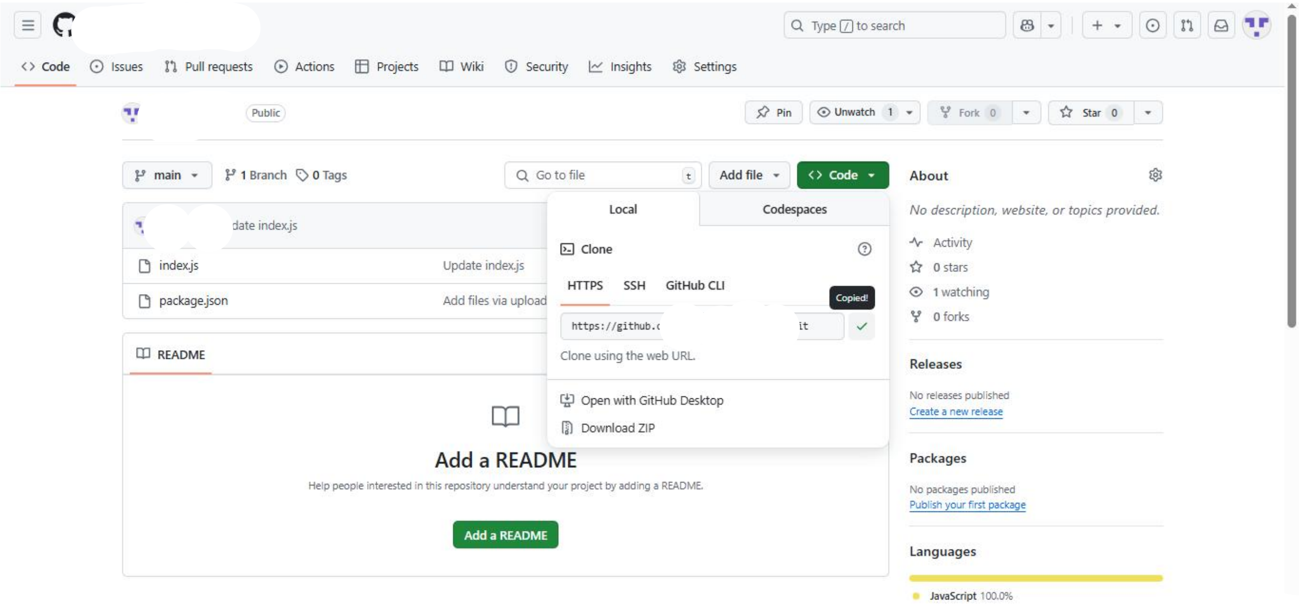
```
Selecting previously unselected package nginx.
Preparing to unpack .../nginx_1.24.0-2ubuntu7.1_amd64.deb ...
Unpacking nginx (1.24.0-2ubuntu7.1) ...
Setting up nginx (1.24.0-2ubuntu7.1) ...
Setting up nginx-common (1.24.0-2ubuntu7.1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/
nginx.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-5-191:~$ curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -
```

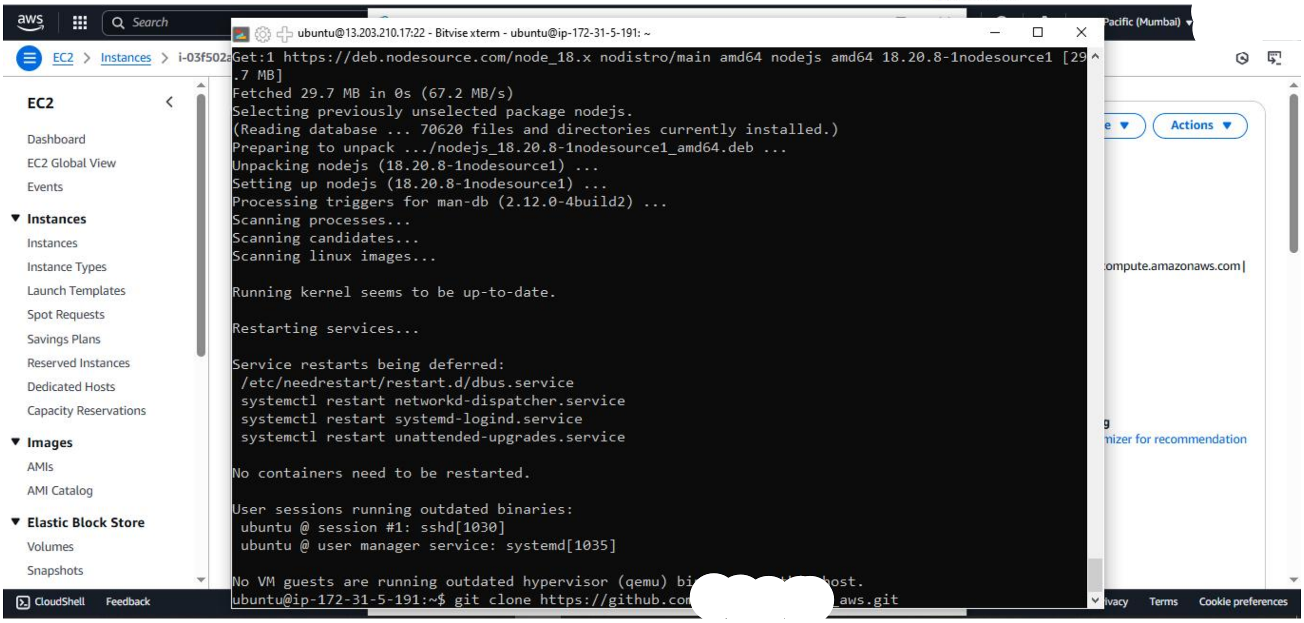
Step 10: Now type the command “sudo apt install nodejs”



```
Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) binaries on this host.
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:4 https://deb.nodesource.com/node_18.x nodistro InRelease [12.1 kB]
Get:5 https://deb.nodesource.com/node_18.x nodistro/main amd64 Packages [11.5 kB]
Hit:6 http://security.ubuntu.com/ubuntu noble-security InRelease
Fetched 23.7 kB in 1s (36.8 kB/s)
Reading package lists... Done
2025-03-31 15:40:20 - Repository configured successfully.
2025-03-31 15:40:20 - To install Node.js, run: apt-get install nodejs -y
2025-03-31 15:40:20 - You can use N|solid Runtime as a node.js alternative
2025-03-31 15:40:20 - To install N|solid Runtime, run: apt-get install nsolid -y

ubuntu@ip-172-31-5-191:~$ sudo apt install nodejs
```

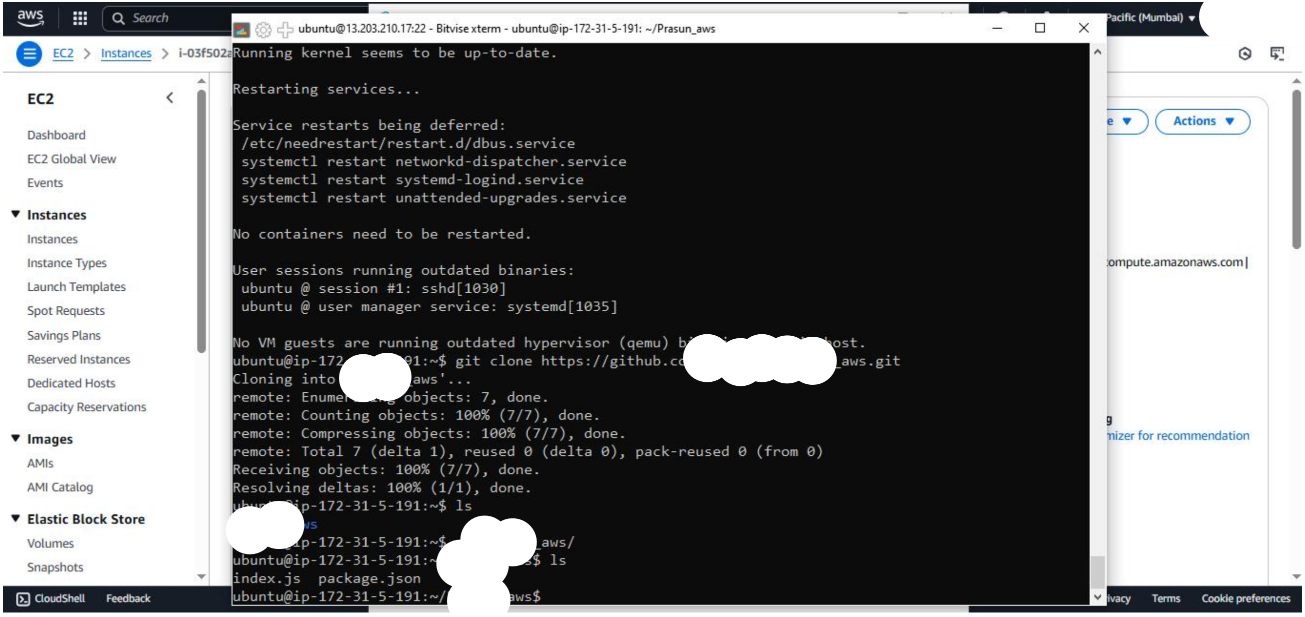
Step 11: Now copy the repository URL and git clone it in the terminal:





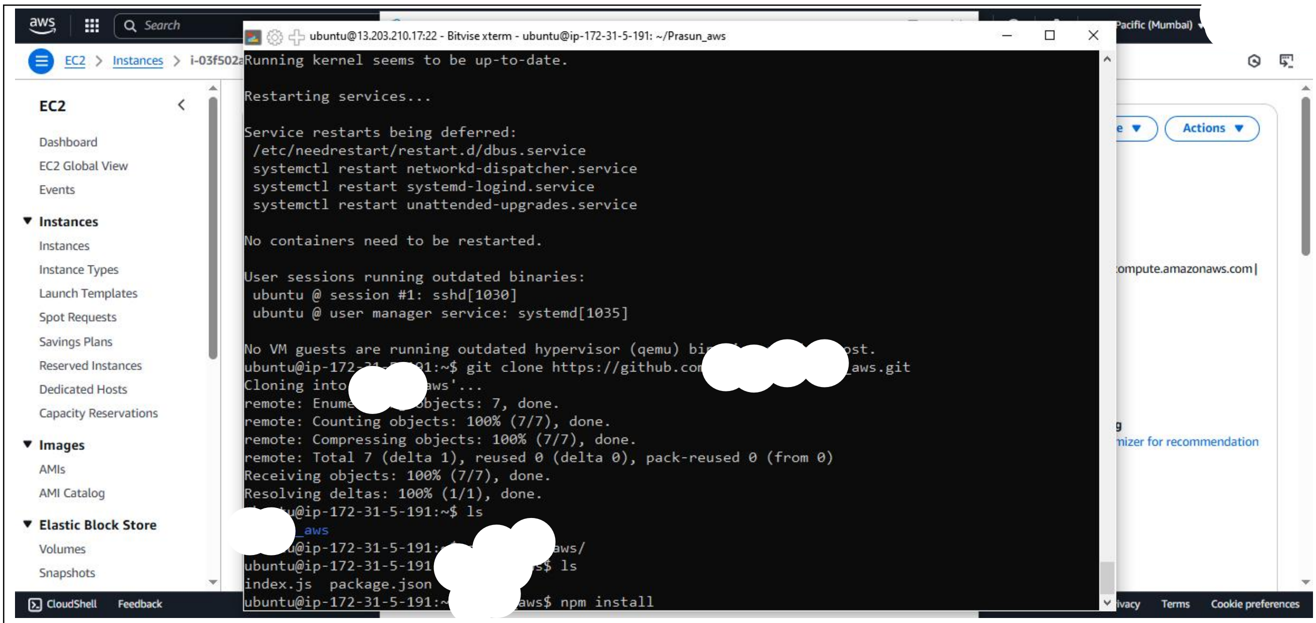
```
Get:1 https://deb.nodesource.com/node_18.x nodistro/main amd64 nodejs amd64 18.20.8-1nodesource1 [29
.7 MB]
Fetched 29.7 MB in 0s (67.2 MB/s)
Selecting previously unselected package nodejs.
(Reading database ... 70620 files and directories currently installed.)
Preparing to unpack .../nodejs_18.20.8-1nodesource1_amd64.deb ...
Unpacking nodejs (18.20.8-1nodesource1) ...
Setting up nodejs (18.20.8-1nodesource1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) bi[redacted]host.
ubuntu@ip-172-31-5-191:~$ git clone https://github.co[redacted]aws.git
```

Step 12: Now we check if the files from the repository are cloned or not by changing directories.


ubuntu@13.203.210.17:22 - Bitvise xterm - ubuntu@ip-172-31-5-191: ~/Prasun_aws
EC2
Instances
Actions
CloudShell
Feedback

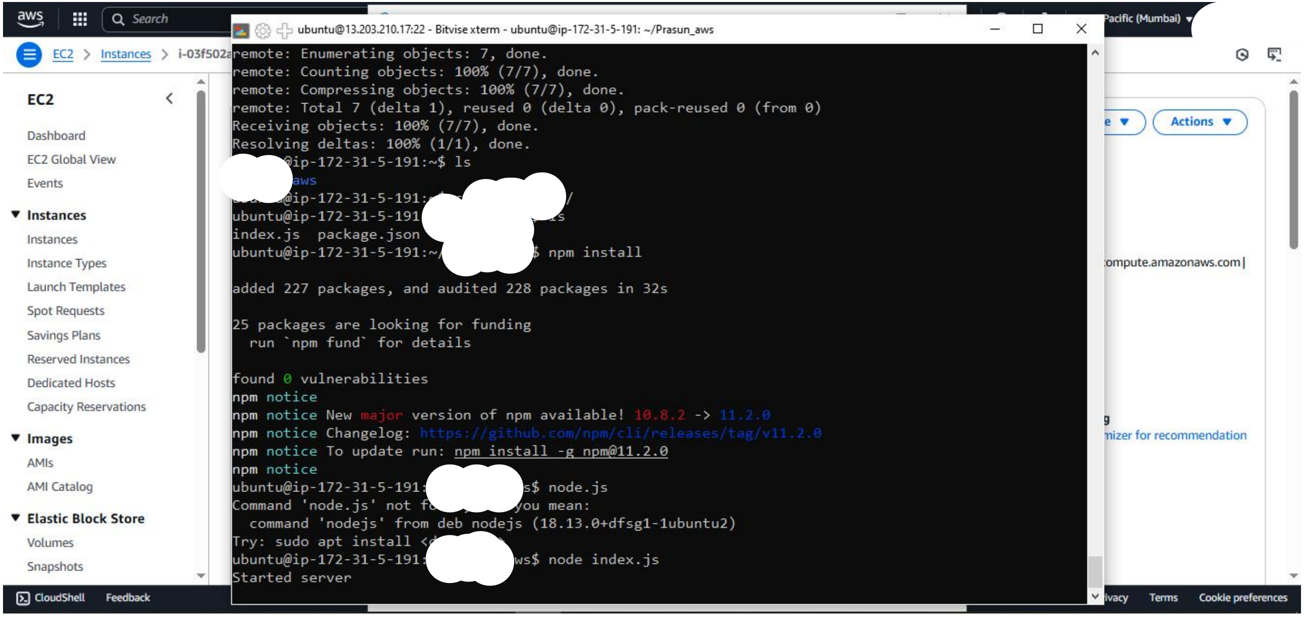
```
Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) bi[redacted]host.
ubuntu@ip-172[redacted]91:~$ git clone https://github.c[redacted]_aws.git
Cloning into [redacted]aws'...
remote: Enume[redacted]g objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), done.
Resolving deltas: 100% (1/1), done.
ubu[redacted]ip-172-31-5-191:~$ ls
[redacted]s
[redacted]p-172-31-5-191:~$ [redacted]aws/
ubuntu@ip-172-31-5-191:~[redacted]$ ls
index.js  package.json
ubuntu@ip-172-31-5-191:~/[redacted]aws$
```

Step 13: Now type the command “npm install”.



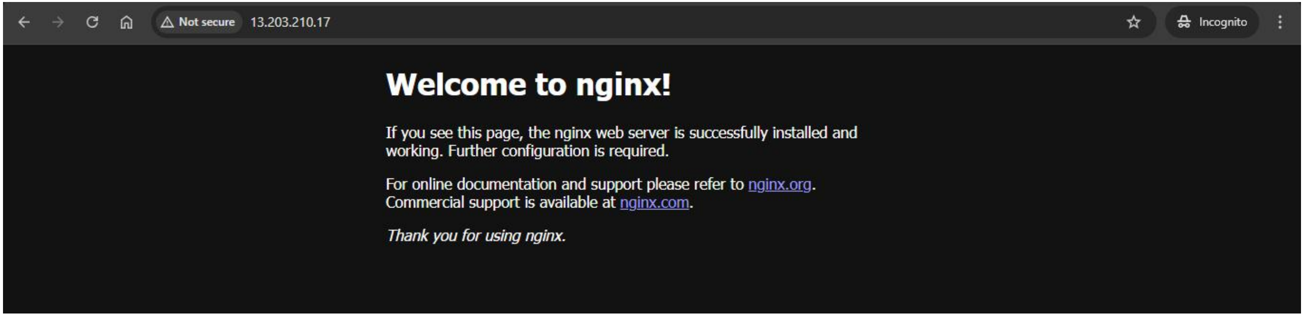
```
Running kernel seems to be up-to-date.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1030]
 ubuntu @ user manager service: systemd[1035]

No VM guests are running outdated hypervisor (qemu) bi[redacted]ost.
ubuntu@ip-172[redacted]1:~$ git clone https://github.co[redacted]_aws.git
Cloning into[redacted]aws'...
remote: Enume[redacted]objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), done.
Resolving deltas: 100% (1/1), done.
[redacted]u@ip-172-31-5-191:~$ ls
[redacted]_aws
[redacted]u@ip-172-31-5-191:[redacted]aws/
ubuntu@ip-172-31-5-191[redacted]$ ls
index.js  package.json
ubuntu@ip-172-31-5-191:~[redacted]aws$ npm install
```

Step 14: Now we start the server using command “node index.js”.



```
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), done.
Resolving deltas: 100% (1/1), done.
[redacted]@ip-172-31-5-191:~$ ls
[redacted]aws
[redacted]@ip-172-31-5-191:[redacted]/
ubuntu@ip-172-31-5-191[redacted]s
index.js  package.json
ubuntu@ip-172-31-5-191:~/[redacted]$ npm install

added 227 packages, and audited 228 packages in 32s

25 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New major version of npm available! 10.8.2 -> 11.2.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.2.0
npm notice To update run: npm install -g npm@11.2.0
npm notice
ubuntu@ip-172-31-5-191:[redacted]s$ node.js
Command 'node.js' not f[redacted]you mean:
  command 'nodejs' from deb nodejs (18.13.0+dfsg1-1ubuntu2)
Try: sudo apt install <[redacted]
ubuntu@ip-172-31-5-191:[redacted]ws$ node index.js
Started server
```

Step 15: Now we open the IP in incognito mode.



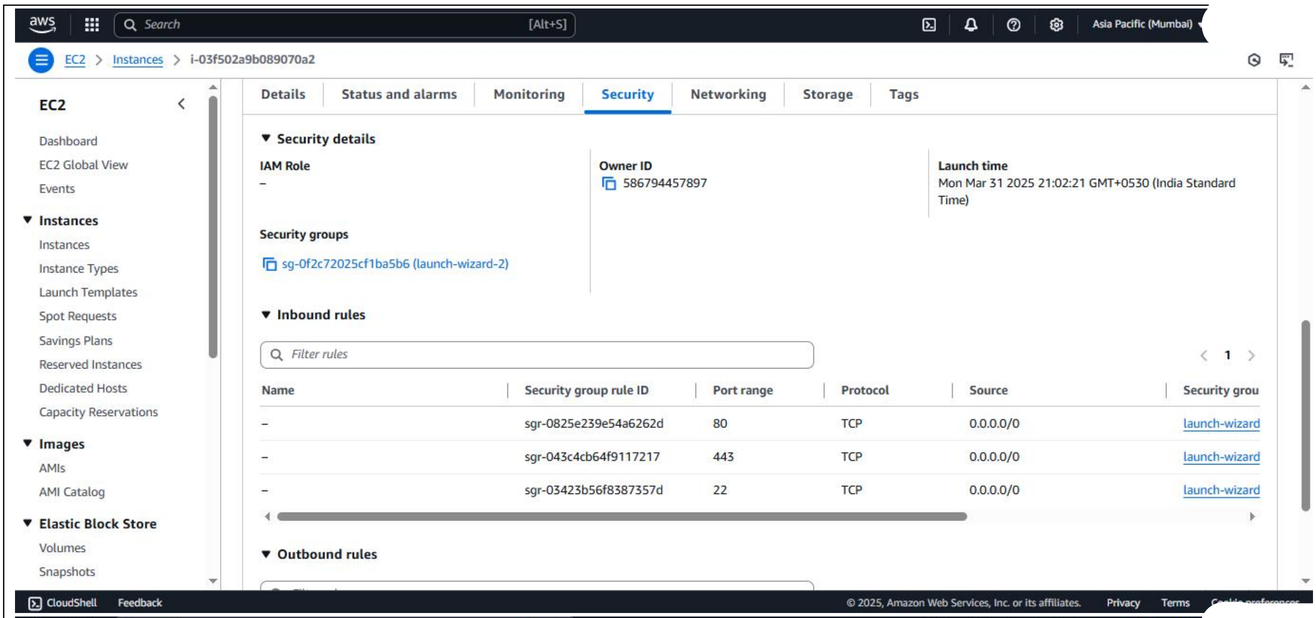
Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Step 16: Now we go to instance then Security. Then open “security groups” and click on Edit Inbound rules.



▼ Security details

IAM Role: –

Owner ID: 586794457897

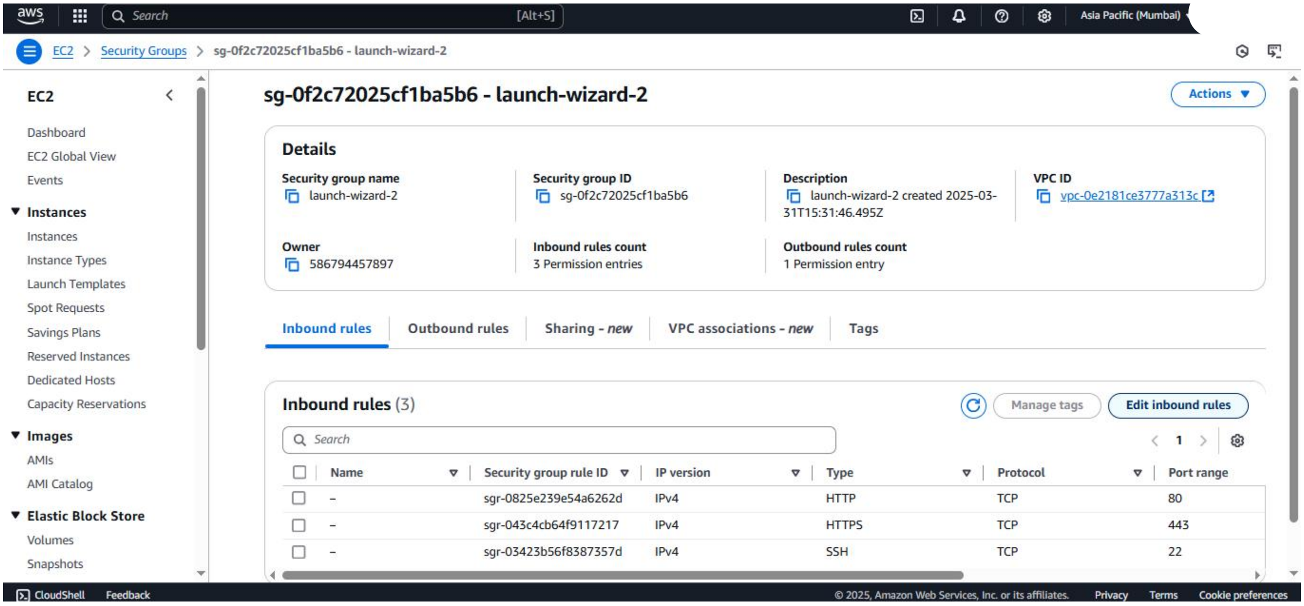
Launch time: Mon Mar 31 2025 21:02:21 GMT+0530 (India Standard Time)

Security groups: sg-0f2c72025cf1ba5b6 (launch-wizard-2)

▼ Inbound rules

Name	Security group rule ID	Port range	Protocol	Source	Security grou
–	sgr-0825e239e54a6262d	80	TCP	0.0.0.0/0	launch-wizard
–	sgr-043c4cb64f9117217	443	TCP	0.0.0.0/0	launch-wizard
–	sgr-03423b56f8387357d	22	TCP	0.0.0.0/0	launch-wizard

▼ Outbound rules


Search [Alt+S]
Asia Pacific (Mumbai)
EC2 > Security Groups > sg-0f2c72025cf1ba5b6 - launch-wizard-2
Actions ▼
Inbound rules | Outbound rules | Sharing - new | VPC associations - new | Tags
Manage tags
Edit inbound rules
CloudShell Feedback © 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

sg-0f2c72025cf1ba5b6 - launch-wizard-2

Details

Security group name: launch-wizard-2

Security group ID: sg-0f2c72025cf1ba5b6

Description: launch-wizard-2 created 2025-03-31T15:31:46.495Z

VPC ID: vpc-0e2181ce3777a313c

Owner: 586794457897

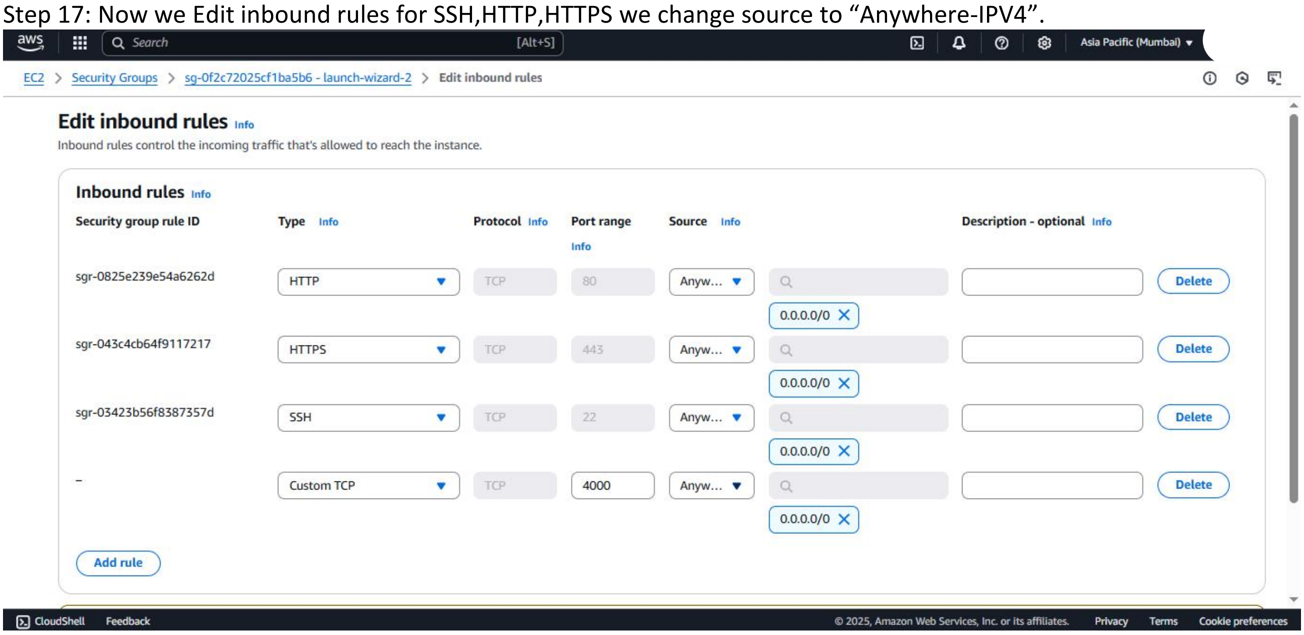
Inbound rules count: 3 Permission entries

Outbound rules count: 1 Permission entry

Inbound rules (3)

	Name	Security group rule ID	IP version	Type	Protocol	Port range
□	–	sgr-0825e239e54a6262d	IPv4	HTTP	TCP	80
□	–	sgr-043c4cb64f9117217	IPv4	HTTPS	TCP	443
□	–	sgr-03423b56f8387357d	IPv4	SSH	TCP	22

Step 17: Now we Edit inbound rules for SSH,HTTP,HTTPS we change source to “Anywhere-IPV4”.


Search [Alt+S]
Asia Pacific (Mumbai) ▼
EC2 > Security Groups > sg-0f2c72025cf1ba5b6 - launch-wizard-2 > Edit inbound rules
Add rule
CloudShell Feedback © 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

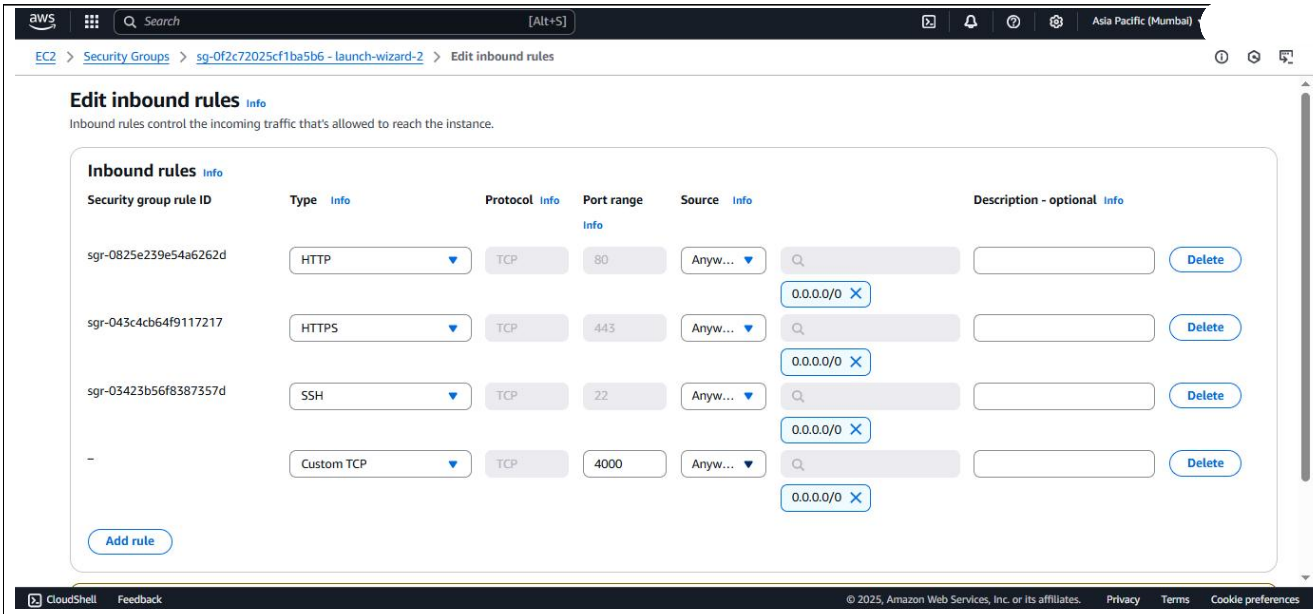
Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info		Description - optional Info	
sgr-0825e239e54a6262d	HTTP	TCP	80	Anyw...	0.0.0.0/0		Delete
sgr-043c4cb64f9117217	HTTPS	TCP	443	Anyw...	0.0.0.0/0		Delete
sgr-03423b56f8387357d	SSH	TCP	22	Anyw...	0.0.0.0/0		Delete
–	Custom TCP	TCP	4000	Anyw...	0.0.0.0/0		Delete

Step 18: Now we add rule “Custom TCP” and set port range to 4000. And save rules



EC2 > Security Groups > sg-0f2c72025cf1ba5b6 - launch-wizard-2 > Edit inbound rules

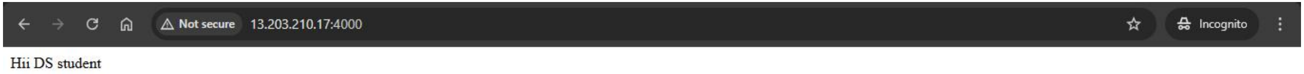
Edit inbound rules

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules

Security group rule ID	Type	Protocol	Port range	Source		Description - optional
sgr-0825e239e54a6262d	HTTP	TCP	80	Anyw...	0.0.0.0/0	
sgr-043c4cb64f9117217	HTTPS	TCP	443	Anyw...	0.0.0.0/0	
sgr-03423b56f8387357d	SSH	TCP	22	Anyw...	0.0.0.0/0	
-	Custom TCP	TCP	4000	Anyw...	0.0.0.0/0	

Step 19: Now we again copy the IP to incognito mode and add ":4000" at the end of IP address.

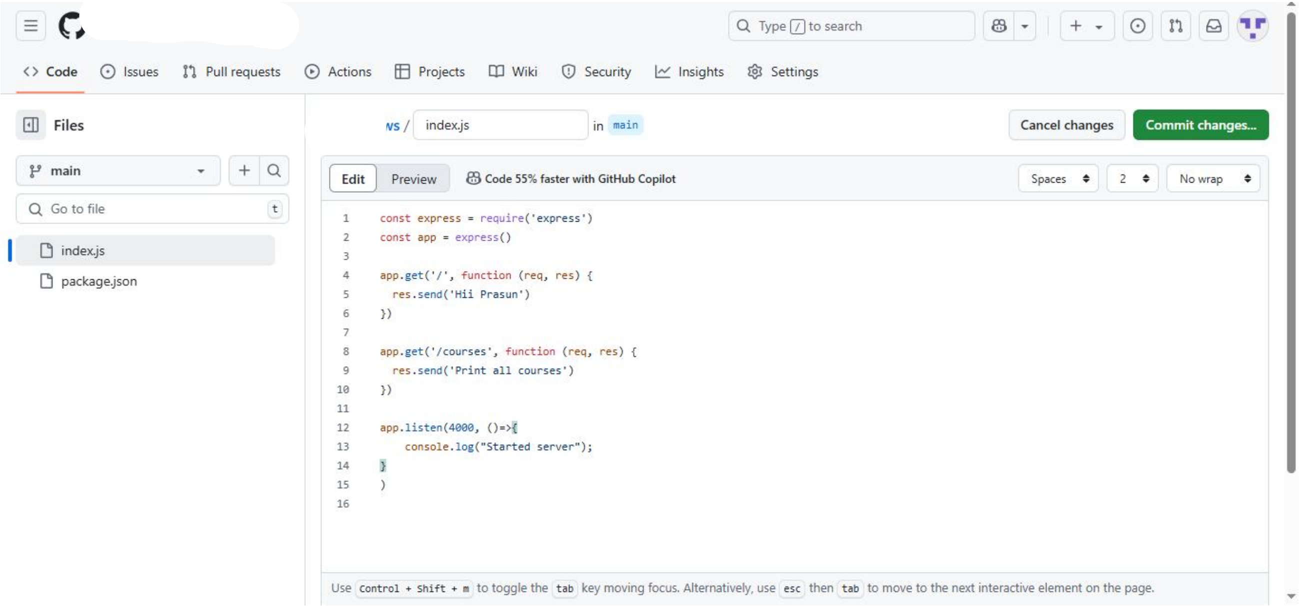


Not secure 13.203.210.17:4000

Hii DS student

And we have successfully deployed a site from github to EC2 the running in server.

Step 20: Now we open the repository in Github. Then click on the "index.js" file. Then edit the file and make some changes. Then save the edit by commit the change with a message as user preferred.

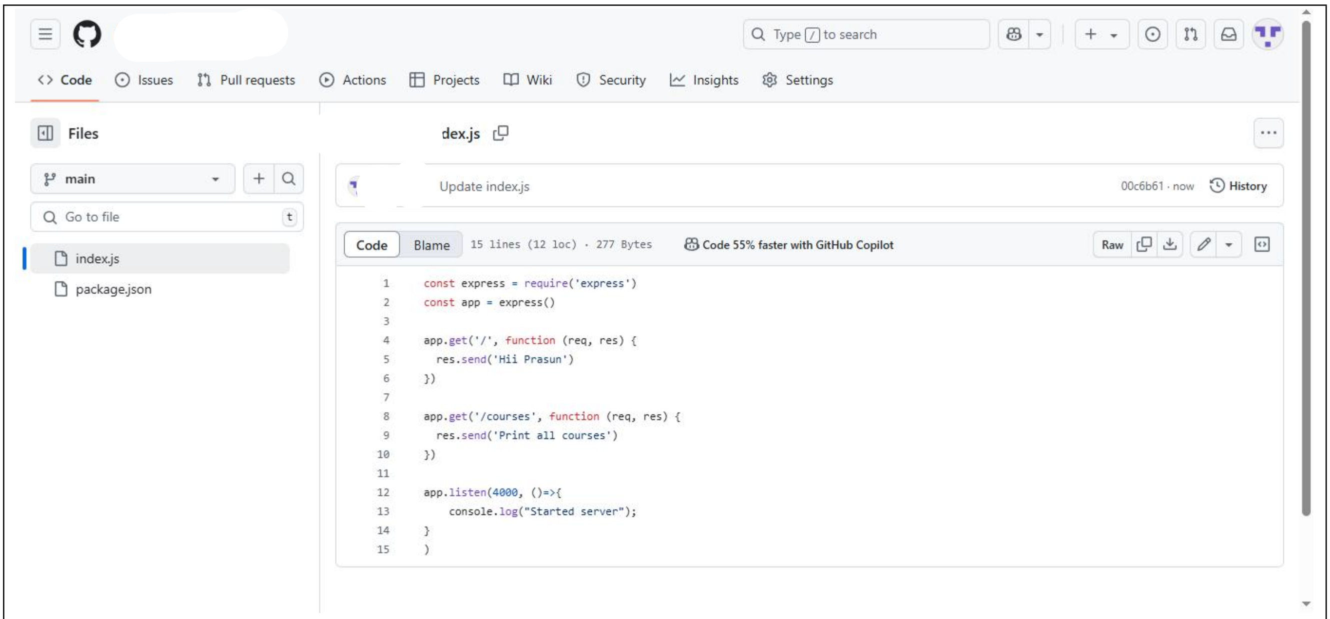


ws / index.js in main

```
const express = require('express')
const app = express()

app.get('/', function (req, res) {
  res.send('Hii Prasun')
})

app.get('/courses', function (req, res) {
  res.send('Print all courses')
})

app.listen(4000, ()=>{
    console.log("Started server");
}
)

```

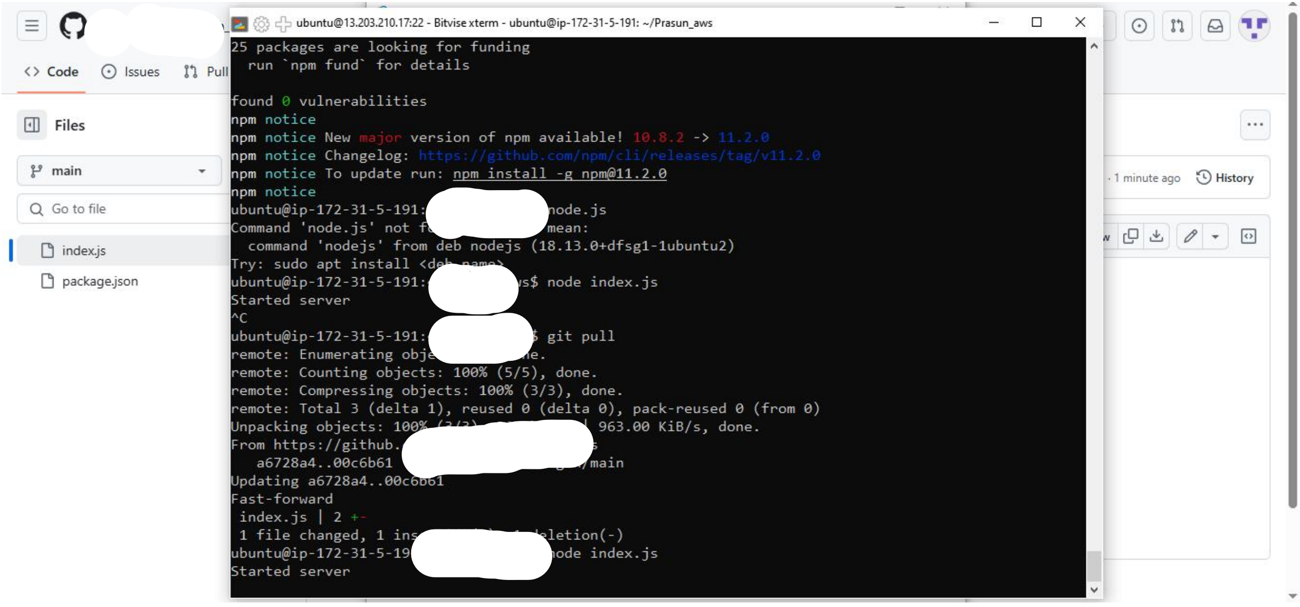
Use Control + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.

commit changes



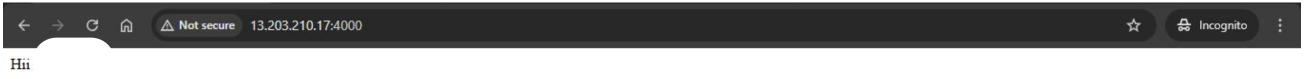
```
const express = require('express')
const app = express()

app.get('/', function (req, res) {
  res.send('Hii Prasun')
})

app.get('/courses', function (req, res) {
  res.send('Print all courses')
})

app.listen(4000, ()=>{
    console.log("Started server");
}
)
```

Step 21: Now that we have edited the file in the repo we need to retrieve the latest changed file in our directory in server by using the command "git pull". And run the server again using "node index.js".


ubuntu@13.203.210.17:22 - Bitvise xterm - ubuntu@ip-172-31-5-191: ~/Prasun_aws
Code
Issues
Files
main
Go to file
index.js
package.json
1 minute ago
History

```
25 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New major version of npm available! 10.8.2 -> 11.2.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.2.0
npm notice To update run: npm install -g npm@11.2.0
npm notice
ubuntu@ip-172-31-5-191:[redacted]node.js
Command 'node.js' not f            mean:
  command 'nodejs' from deb nodejs (18.13.0+dfsg1-1ubuntu2)
Try: sudo apt install <deb name>
ubuntu@ip-172-31-5-191:[redacted]s$ node index.js
Started server
^C
ubuntu@ip-172-31-5-191:[redacted]$ git pull
remote: Enumerating obje         e.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3)        | 963.00 KiB/s, done.
From https://github.[redacted]
   a6728a4..00c6b61                /main
Updating a6728a4..00c6b61
Fast-forward
 index.js | 2 +-
 1 file changed, 1 ins[redacted]eletion(-)
ubuntu@ip-172-31-19             node index.js
Started server
```

Step 22: Now if we again paste IP in incognito mode we can see the changed content on the server.



Hii [redacted]