

# Amazon EC2

## 1. Launch and EC2 Instance with AMI

[Option+S]

United States (N. Virginia) ▾

SaurabGhimire ▾

:77e3b4349da4ec

Instance summary for i-0be77e3b4349da4ec [Info](#)

🔄

Connect

Instance state ▾

Actions ▾

Updated 14 minutes ago

Instance ID

[i-0be77e3b4349da4ec](#)

IPv6 address

–

Hostname type

IP name: ip-172-31-42-101.ec2.internal

Answer private resource DNS name

–

Auto-assigned IP address

[3.80.169.175](#) [Public IP]

IAM Role

–

IMDSv2

Required

Public IPv4 address

[3.80.169.175](#) | [open address](#)

Instance state

✔ Running

Private IP DNS name (IPv4 only)

[ip-172-31-42-101.ec2.internal](#)

Instance type

t2.micro

VPC ID

[vpc-0efd5dc5990110036](#)

Subnet ID

[subnet-0958d8b6ab7752f8e](#)

Instance ARN

[arn:aws:ec2:us-east-1:103619411293:instance/i-0be77e3b4349da4ec](#)

Private IPv4 addresses

[172.31.42.101](#)

Public IPv4 DNS

[ec2-3-80-169-175.compute-1.amazonaws.com](#) | [open address](#)

Elastic IP addresses

–

AWS Compute Optimizer finding

🔗 Opt-in to AWS Compute Optimizer for recommendation s.

[Learn more](#)

Auto Scaling Group name

–

Managed

false

## 2. Security Group attached to EC2 Instance

[Option+S]

United States (N. Virginia) ▾

SaurabGhimire ▾

sg-03f89722e3f029f67 - launch-wizard

sg-03f89722e3f029f67 - launch-wizard

Actions ▾

Details

Security group name

[launch-wizard](#)

Owner

[103619411293](#)

Security group ID

[sg-03f89722e3f029f67](#)

Inbound rules count

3 Permission entries

Description

[launch-wizard created 2025-04-02T18:34:25.672Z](#)

Outbound rules count

1 Permission entry

VPC ID

[vpc-0efd5dc5990110036](#)

Inbound rules

Outbound rules

Sharing - new

VPC associations - new

Tags

Inbound rules (3)

🔄

Manage tags

Edit inbound rules

🔍 Search

< 1 >

⚙️

<input type="checkbox"/>	Name ▾	Security group rule ID ▾	IP version ▾	Type ▾	Protocol ▾	Port range ▾
<input type="checkbox"/>	–	sgr-0079ed60116d362c2	IPv4	Custom TCP	TCP	8080
<input type="checkbox"/>	–	sgr-06ec0709bd6a2b1f6	IPv4	SSH	TCP	22
<input type="checkbox"/>	–	sgr-0f44271940414f6ad	IPv4	HTTP	TCP	80

### 3. Connect to EC2 Instance, Setup NodeJs Backend and run App on Port 8080

```

aws
[Option+S]
United States (N. Virginia)
SaurabGhimire

Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Wed Apr 2 19:05:08 2025 from 18.206.107.27
[ec2-user@ip-172-31-42-101 ~]$ ls
simple-react-node-app
[ec2-user@ip-172-31-42-101 ~]$ cd simple-react-node-app/
[ec2-user@ip-172-31-42-101 simple-react-node-app]$ pm2 status

```

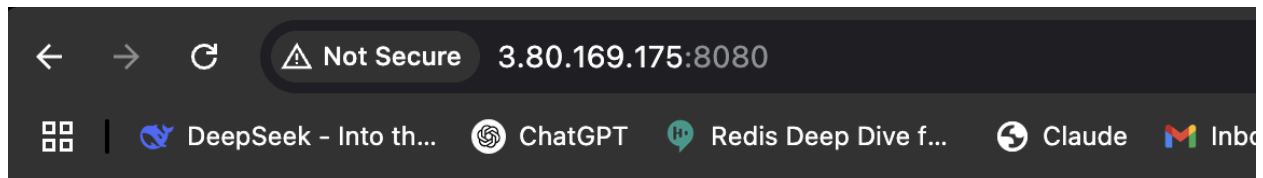
id	name	namespace	version	mode	pid	uptime	v	status	cpu	mem	user	watching
0	app	default	1.0.0	fork	29788	5m	0	online	0%	54.4mb	ec2-user	disabled

```

[ec2-user@ip-172-31-42-101 simple-react-node-app]$

```

4. Open Browser and connect to app port on 8080



Server IPv4: 172.31.42.101

```
Hostname: ip-172-31-42-101.ec2.internal
```

# Amazon LightSail

## 1. LightSail Setup


Search documentation


HomeLightsail for Research⚙️👤 SaurabGhimire (103619411293) ▼

Amazon\_Linux\_2023-1Info


512 MB RAM, 2 vCPUs, 20 GB SSD


DeleteRebootStop


 **Amazon Linux 2023**


**AWS Region**  
 Ohio, Zone A (us-east-2a)

**Networking type**  
Dual-stack  
[Change networking type](#)

**Public IPv4 address**  
 18.222.120.98

**Private IPv4 address**  
 172.26.14.15

**Public IPv6 address**  
 2600:1f16:b53:a400:2839:a353:7e2c:7a1c

**Instance status**  
 **Running**

Connect

Metrics

Snapshots

Storage

Networking

Domains

Tags

History

**Connect to your instance** Info

You can connect using your browser, or your own compatible SSH client.

## 2. Security Group for LightSail enabling Http 80, Http 8080 and SSH 22 anywhere







Search documentation

HomeLightsail for Research⚙️👤 SaurabGhimire (103619411293) ▼

IPv4 Firewall?

Create rules to open ports to the internet, or to a specific IPv4 address or range.  
[Learn more about firewall rules](#)

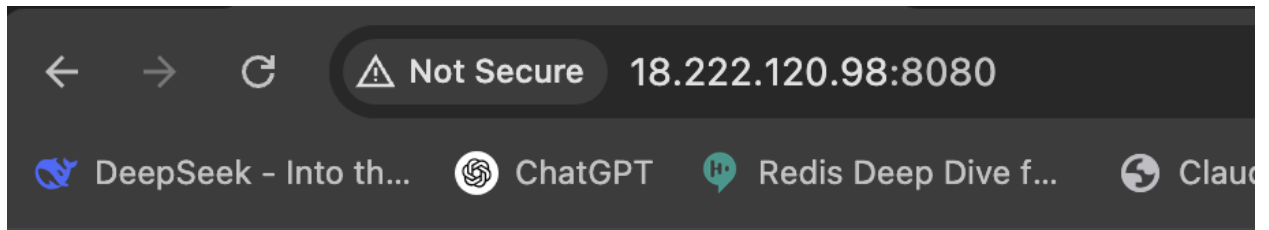
+ Add rule

Application	Protocol	Port or range / Code	Restricted to	
SSH	TCP	22	Any IPv4 address Lightsail browser SSH/RDP?	 
HTTP	TCP	80	Any IPv4 address	 
Custom	TCP	8080	Any IPv4 address	 

IPv6 networking

Enable Internet Protocol version 6 to have an IPv6 address assigned to your resource.  
[Learn more about IPv6](#)

## 3. Access App in LightSail using browser



Amazon LightSail

Server IPv4: 172.26.14.15

Hostname: ip-172-26-14-15.us-east-2.compute.internal