

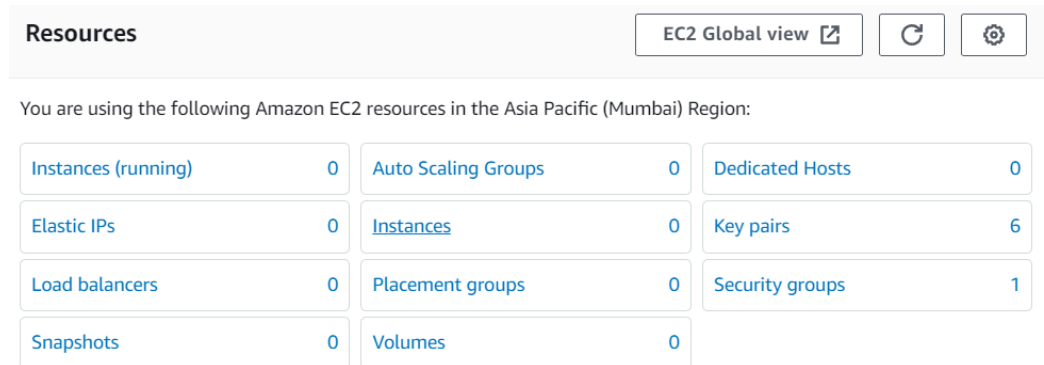
# ASSIGNMENT NO-10

🧱 Problem Statement:- **Deploy a project from github to EC2 by creating new security group and user data.**

🧱 Steps:-

## 🧱 Security groups creation:-

1. Go to EC2 dashboard and click on “Security groups”.

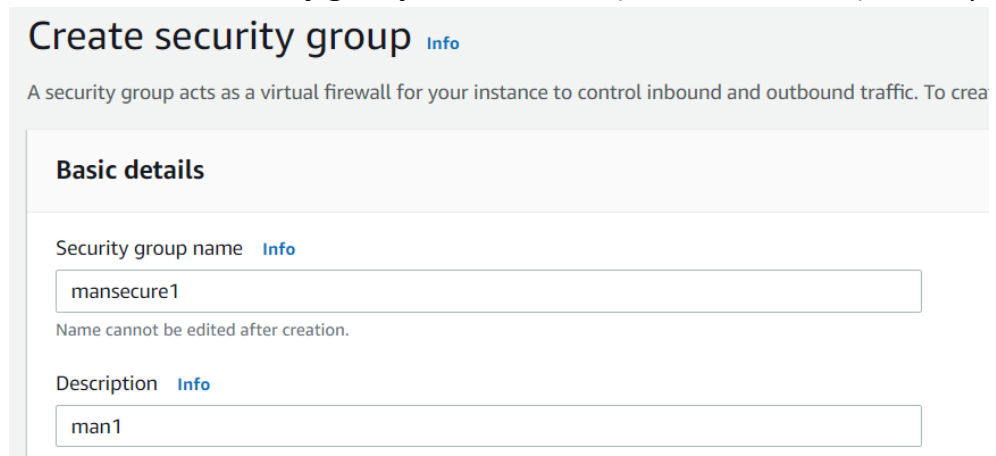


Resources EC2 Global view Refresh Settings

You are using the following Amazon EC2 resources in the Asia Pacific (Mumbai) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts	0
Elastic IPs	0	Instances	0	Key pairs	6
Load balancers	0	Placement groups	0	Security groups	1
Snapshots	0	Volumes	0		

2. Click **create Security groups** .Give name(ex-mansecure1),description.



### Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To crea

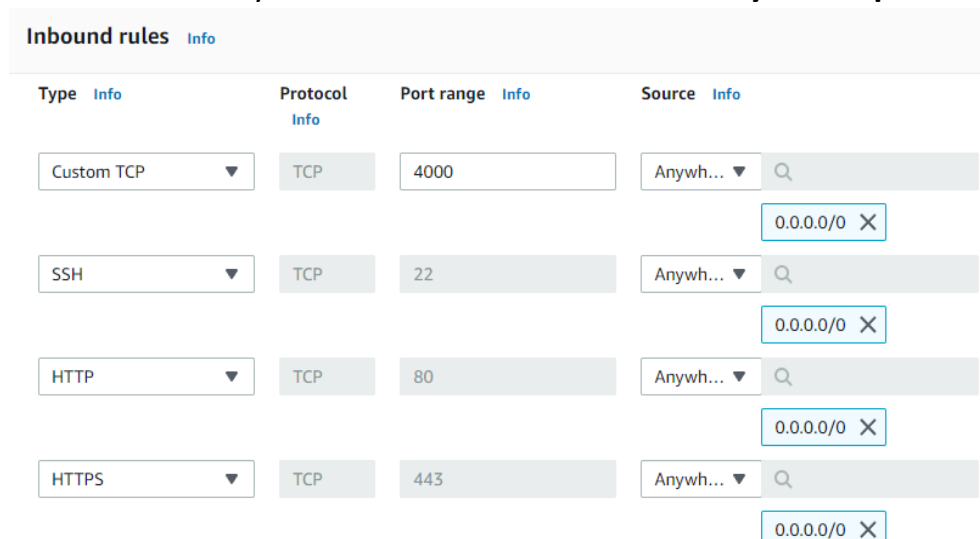
#### Basic details

Security group name Info

Name cannot be edited after creation.

Description Info

3. In inbound rules, click add rule and in type give custom TCP,SSH,HTTP,HTTPS and port range will be 4000 for custom TCP and the others are by default and in Source all are **anywhere public IPv4**.



### Inbound rules Info

Type <span>Info</span>	Protocol <span>Info</span>	Port range <span>Info</span>	Source <span>Info</span>
Custom TCP ▼	TCP	4000	Anywh... ▼ <input type="text" value="0.0.0.0/0"/>
SSH ▼	TCP	22	Anywh... ▼ <input type="text" value="0.0.0.0/0"/>
HTTP ▼	TCP	80	Anywh... ▼ <input type="text" value="0.0.0.0/0"/>
HTTPS ▼	TCP	443	Anywh... ▼ <input type="text" value="0.0.0.0/0"/>

Now, click create Security group and the group will be created.

Security Groups (2) <a href="#">Info</a>				<a href="#">Refresh</a>	<a href="#">Actions</a> ▼	<a href="#">Export</a>
<input type="text" value="Filter security groups"/>						
<input type="checkbox"/>	Name ▼	Security group ID ▼	Security group name ▼			
<input type="checkbox"/>	–	sg-09249ff099ae73a4f	default			
<input type="checkbox"/>	–	sg-09f812d1e5b00aebf	mansecure1			

### **EC2 creation:-**

1. In EC2 dashboard click **launch instances**. Give name, select **ubuntu** for hardware, architecture is 64-bit, instance type is t2.micro.

Recents

Quick Start

Amazon Linux

macOS

Ubuntu

aws

Mac

ubuntu

Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume

ami-02eb7a4783e7e9317 (64-bit (x86)) / ami-0a5dcf1

Virtualization: hvm ENA enabled: true Root devio

Description

Canonical, Ubuntu, 22.04 LTS, amd64 jammy in

Architecture

AMI ID

64-bit (x86)

ami-02eb7a478

Name and tags [Info](#)

Name

manec2

▼ Instance type [Info](#)

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Linux pricing: 0.0124 USD per Hour

On-Demand Windows pricing: 0.017 USD per Hour

On-Demand RHEL pricing: 0.0724 USD per Hour

On-Demand SUSE pricing: 0.0124 USD per Hour

2. Give key pair(in case if u have it give existing one). In Network settings Firewall section click **select existing security group** and select the security group which is created previously(ex-mansecure1).

#### Firewall (security groups) [Info](#)

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

☐ Create security group

☒ Select existing security group

#### Security groups [Info](#)

Select security groups ▼

mansecure1 sg-09f812d1e5b00aebf ✕  
VPC: vpc-044ae7b2b99754d9f

### 3. In Advance details , User data section type the following commands-

User data - optional [Info](#)

Enter user data in the field.

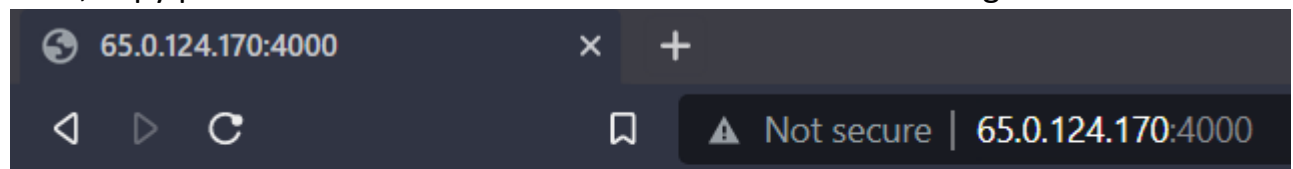
```
#!/bin/bash
apt-get update
apt-get install -y nginx
systemctl start nginx
systemctl enable nginx
apt-get install -y git
curl -sL https://deb.nodesource.com/setup_18.x | sudo -E bash -
apt-get install -y nodejs
git clone https://github.com/manas003884/repo2.git
cd repo2
npm install
node index.js
```

(In git clone line user can give his repo name and cd line the repo name will be according to his repo name.)

Now, click launch instances and the instance will be created.

Instances (1) <a href="#">Info</a>			
<input type="text" value="Find instance by attribute or tag (case-sensitive)"/>			
<input type="checkbox"/>	Name	Instance ID	Instance state
<input type="checkbox"/>	manec2	i-09cc62e14b3f1c3d1	<span>Running</span>

Now, copy public IPv4 address and run it with :4000 and we will get the website.



Hello mckvie