



Placement Empowerment Program

Cloud Computing and DevOps Centre

Host a static website on a cloud VM

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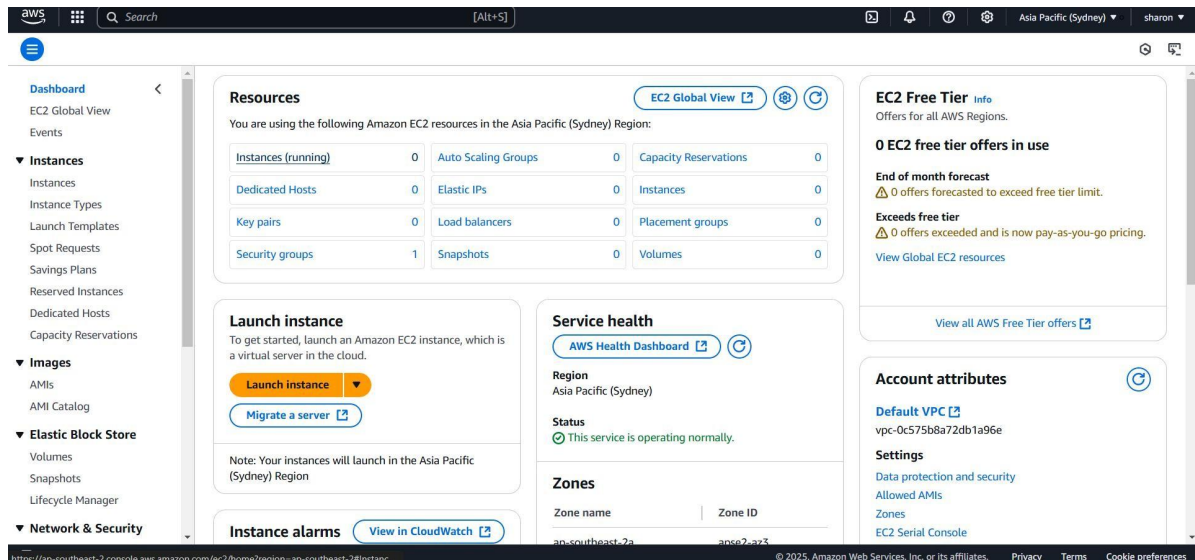
PoC: Host a static website on a cloud VM

Step 1:

Open Aws console

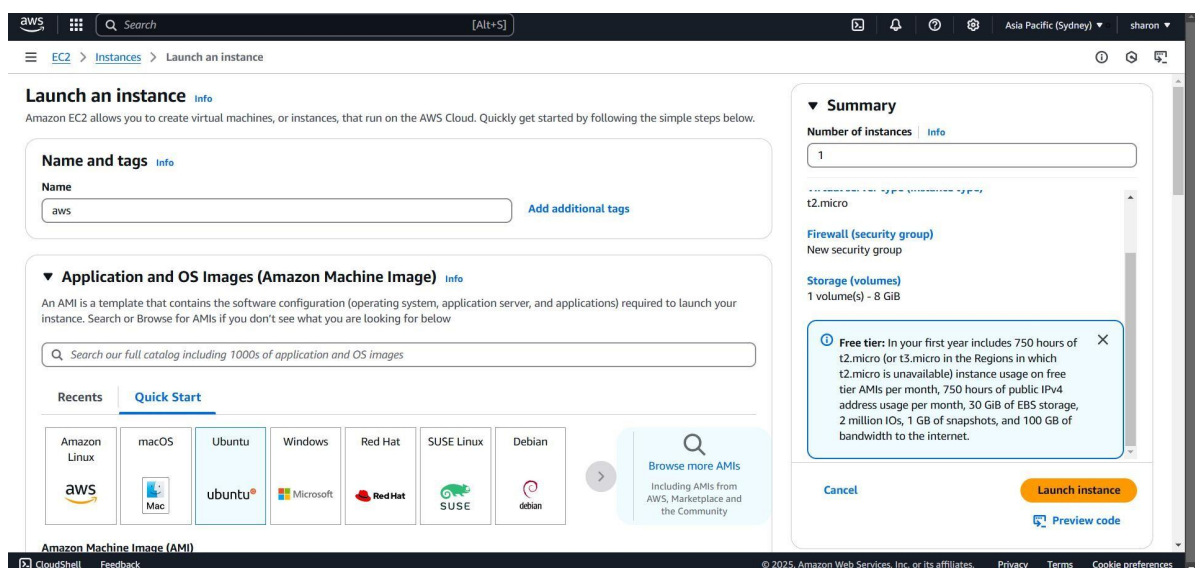
Step 2:

Search for ec2 instance and click create instance



Step3:

Select your ami ,keys and security keys.



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.

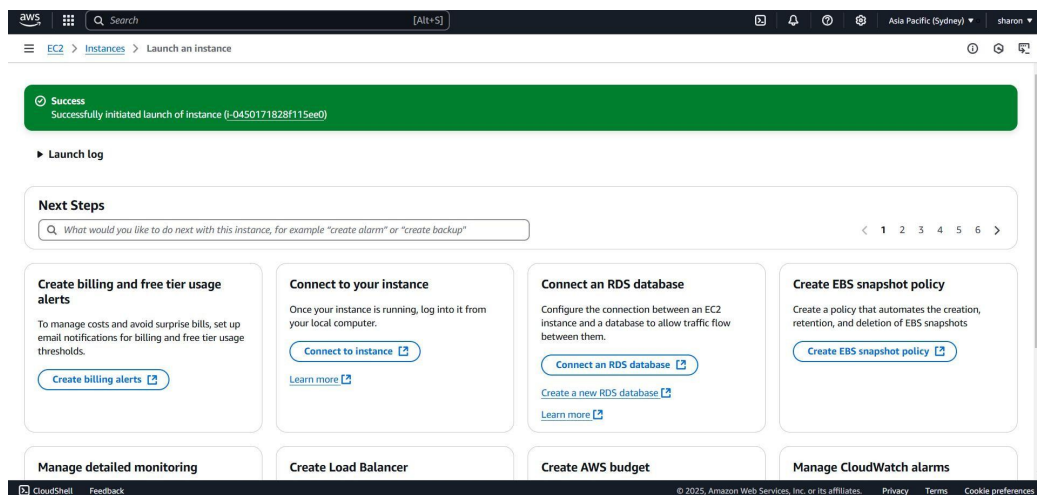
☒ Create security group
 ☐ Select existing security group

We'll create a new security group called 'launch-wizard-2' with the following rules:

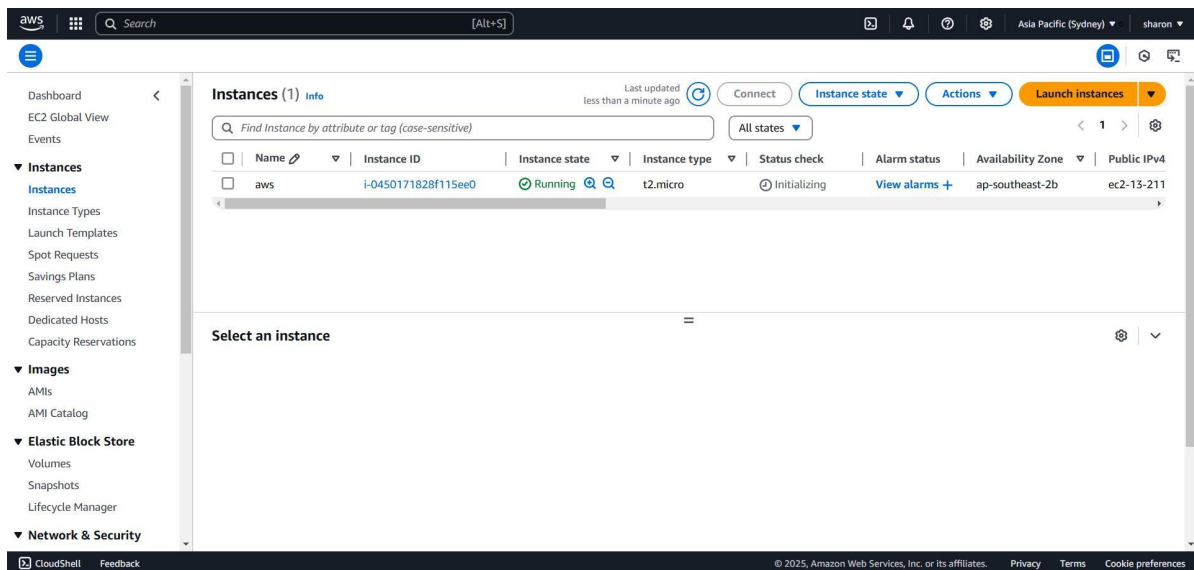
- ☒ Allow SSH traffic from Anywhere
0.0.0.0/0
Helps you connect to your instance
- ☒ Allow HTTPS traffic from the internet
To set up an endpoint, for example when creating a web server
- ☒ Allow HTTP traffic from the internet
To set up an endpoint, for example when creating a web server

Step 4:

Launch your instance



Step 5: click on the instance id



Your virtual machine is successfully created.

Step 6: open your command prompt and change the directory to downloads as the key is downloaded in this path

```
ubuntu@ip-172-31-4-65: ~
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\sharon> cd downloads
PS C:\Users\sharon\downloads> ssh -i "aws.pem" ubuntu@ec2-13-211-61-184.ap-southeast-2.compute.amazonaws.com
The authenticity of host 'ec2-13-211-61-184.ap-southeast-2.compute.amazonaws.com (13.211.61.184)' can't be established.
ED25519 key fingerprint is SHA256:k0u8ptfsr8mZDNo31PWKjBPw1BWmrdRuJeVJqREf98g.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-13-211-61-184.ap-southeast-2.compute.amazonaws.com' (ED25519) to the list of known hosts
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1021-aws x86_64)

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

System information as of Tue Jan 28 05:08:31 UTC 2025

System load:  0.0          Processes:    105
Usage of /:   24.9% of 6.71GB  Users logged in:  0
Memory usage: 20%          IPv4 address for enX0: 172.31.4.65
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.
```

Step 7:

Copy the ssh id from the vm created and paste in the cmd

```
ubuntu@ip-172-31-4-65: ~  
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
  
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows  
  
PS C:\Users\sharon> cd downloads  
PS C:\Users\sharon\downloads> ssh -i "aws.pem" ubuntu@ec2-13-211-61-184.ap-southeast-2.compute.amazonaws.com  
The authenticity of host 'ec2-13-211-61-184.ap-southeast-2.compute.amazonaws.com (13.211.61.184)' can't be established.  
ED25519 key fingerprint is SHA256:k0u8ptfsr8mZDNo31PWKjBPw1BWmrdRuJeVJqREf98g.  
This key is not known by any other names.  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
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Swap usage:   0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
0 updates can be applied immediately.
```

Step 8: update the ami choosen using the command sudo apt update

```
ubuntu@ip-172-31-4-65:~$ sudo apt update  
Hit:1 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble InRelease  
Get:2 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]  
Get:3 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]  
Get:4 http://ap-southeast-2.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://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]  
Get:7 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]  
Get:8 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]  
Get:9 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]  
Get:10 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]  
Get:11 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]  
Get:12 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]  
Get:13 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [822 kB]  
Get:14 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [186 kB]  
Get:15 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]  
Get:16 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [981 kB]  
Get:17 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [244 kB]  
Get:18 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [313 kB]  
Get:19 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [19.9 kB]  
Get:20 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [623 kB]  
Get:21 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [120 kB]  
Get:22 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]  
Get:23 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [16.0 kB]  
Get:24 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3844 B]  
Get:25 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]  
Get:26 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [552 B]  
Get:27 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
```


Step 9: upgrade using the line sudo apt upgrade

```
ubuntu@ip-172-31-4-65:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following upgrades have been deferred due to phasing:
  bpftrace kmod libattr1 libcap2 libcap2-bin libgmp10 libgpg-error-l10n libgpg-error0 libidn2-0 libkmod2 libmd0
  libnl-3-200 libnl-genl-3-200 libnl-route-3-200 libpam-cap libselinux1 libunistring5
The following packages will be upgraded:
  bsdxattrutils bsdxutils eject fdisk libaio1t64 libblkid1 libbsd0 libdw1t64 libelf1t64 libfdisk1 libmount1
  libpolkit-agent-1-0 libpolkit-gobject-1-0 libpython3.12-minimal libpython3.12-stdlib libpython3.12t64 libsmart
  libuuid1 linux-tools-common mount polkitd python3.12 python3.12-minimal rsync util-linux uuid-runtime vim vim-
  vim-runtime vim-tiny xfsprogs xxd
32 upgraded, 0 newly installed, 0 to remove and 17 not upgraded.
12 standard LTS security updates
Need to get 23.2 MB of archives.
After this operation, 16.4 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 bsdxutils amd64 1:2.39.3-9ubun
5.2 kB]
Get:2 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 util-linux amd64 2.39.3-9ubun
127 kB]
Get:3 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 mount amd64 2.39.3-9ubuntu6.2
```

Step 10: Install apache2 by using the command sudo apt upgrade

```
no VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-4-65:~$ sudo apt install apache2
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-ldap libaprutil1t64
  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-ldap libaprutil1t64
  liblua5.4-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 17 not upgraded.
Need to get 2084 kB of archives.
After this operation, 8094 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapr1t64 amd64 1.7.2-3.1ubuntu0.1 [
108 kB]
Get:2 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1t64 amd64 1.6.3-1.1ubuntu7 [91.9 k
B]
Get:3 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.3-1.1ubuntu
7 [11.2 kB]
Get:4 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-ldap amd64 1.6.3-1.1ubuntu7 [9116
B]
Get:5 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble/main amd64 liblua5.4-0 amd64 5.4.6-3build2 [166 kB]
Get:6 http://ap-southeast-2.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 apache2-bin amd64 2.4.58-1ubuntu8.5 [
```

Step 11: clone your git repository

```
ubuntu@ip-172-31-4-65:~$ git clone https://github.com/Binarycoder123/sample.git
Cloning into 'sample'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
```

Step 12: change the directory to default using the command cd /var/www/html

Step 13: Use the command ls to list the files on the directory

Step 14: There will be a index file present defaultly

Step 15: Remove the index file using the command `sudo rm index.html`

Step 16: Now change the directory into your git repo

Step 17: copy your html file into the directory using `sudo cp /var/www/html`

Step 18: use the `cd` command to again change the directory

Step 19: now again change the directory into the default directory `cd /var/www/html`

Step 20: use the command `ls` to view the file present in the directory.