

## Buat instance Ubuntu free tier di AWS

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with navigation links like Dashboard, AWS Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager, and Images. The main content area is titled "Instance summary for i-0c5080a06f019181d (valin-test)". It displays various details about the instance, including its ID, IPv4 and IPv6 addresses, instance state (Running), and network information like VPC ID and private IP address.

## Security Group (allow SSH and HTTP)

The screenshot shows the AWS Security Groups page. It lists two security groups: "sgr-073fc201c09db1898" and "sgr-06fc240a068a987c6". Both groups have inbound rules allowing traffic on port 80 (HTTP) and port 22 (SSH). The "Add rule" button is visible at the bottom left.

The screenshot shows a terminal window with the following session:

```
ubuntu@ip-172-31-1-220: ~
Valin@DESKTOP-VMJSNLD MINGW64 ~/Downloads
$ chmod 400 valin.pe
chmod: cannot access 'valin.pe': No such file or directory
Valin@DESKTOP-VMJSNLD MINGW64 ~/Downloads
$ chmod 400 valin.pem

Valin@DESKTOP-VMJSNLD MINGW64 ~/Downloads
$ ssh -i valin.pem ubuntu@47.129.122.161
The authenticity of host '47.129.122.161 (47.129.122.161)' can't be established.
ED25519 key fingerprint is SHA256:Chr2r4RXGgGrb8YBMxkWo2/5o9kebAT71IPCsDzUSIG.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '47.129.122.161' (ED25519) to the list of known hosts.
.
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1015-aws x86_64)

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

Instruksi :

Setelah instalasi selesai, lakukan konfigurasi berikut:

- Update sistem (sudo apt update && sudo apt upgrade -y).
- Install paket pendukung (misalnya: curl, net-tools, vim).

```
ubuntu@ip-172-31-1-220:~$ history
1 sudo apt update && sudo apt upgrade -y
2 sudo apt install -y curl net-tools vim
```

## Part 2:

### 5. Pembuatan User & Group

- Buat 3 user baru: user1, user2, user3.
- Buat 2 group baru: dev dan ops.
- Masukkan user1 dan user2 ke group dev.
- Masukkan user3 ke group ops.

```
3 sudo adduser user1
4 sudo adduser user2
5 sudo adduser user3
6 sudo groupadd dev
7 sudo groupadd ops
```

### 6. Manajemen Permission

- Buat direktori /project/dev dengan owner group dev.
- Beri permission agar hanya group dev yang bisa membaca & menulis di /project/dev.
- Buat direktori /project/ops dengan owner group ops.
- Beri permission agar hanya group ops yang bisa membaca & menulis di /project/ops.

```
12 sudo mkdir -p /project/dev
13 sudo chown :dev /project/dev
14 sudo chmod 770 /project/dev
15 sudo mkdir -p /project/ops
16 sudo chown :ops /project/ops
17 sudo chmod 770 /project/ops
```

## 7. Pengujian

- Login sebagai user1, coba buat file di /project/dev.
- Login sebagai user3, coba akses /project/dev (harus ditolak).
- Lakukan hal yang sama untuk direktori /project/ops.

```
ubuntu@ip-172-31-1-220:~$ sudo -u user1 touch /project/dev/test1.txt
ubuntu@ip-172-31-1-220:~$ sudo -u user3 ls /project/dev
ls: cannot open directory '/project/dev': Permission denied
ubuntu@ip-172-31-1-220:~$ sudo -u user3 touch /project/ops/test3.txt
```

### Part 3:

8. Install dan konfigurasi Nginx.
9. Buat file index.html sederhana berisi:

*<h1>Hello, ini website pertama saya!</h1>*

- Pengujian  
Akses [http://IP\\_VM](http://IP_VM) dan pastikan halaman yang dibuat muncul.

```
ubuntu@ip-172-31-1-220:~$ sudo apt install -y nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
ubuntu@ip-172-31-1-220:~$ echo "<h1>Hello, ini website pertama saya!</h1>" | sudo tee /var/www/html/index.html
-bash: !: event not found
ubuntu@ip-172-31-1-220:~$ echo '<h1>Hello, ini website pertama saya!</h1>' | sudo tee /var/www/html/index.html
<h1>Hello, ini website pertama saya!</h1>
```



Hello, ini website pertama saya!

## History

```
ubuntu@ip-172-31-1-220:~$ history
 1 sudo apt update && sudo apt upgrade -y
 2 sudo apt install -y curl net-tools vim
 3 sudo adduser user1
 4 sudo adduser user2
 5 sudo adduser user3
 6 sudo groupadd dev
 7 sudo groupadd ops
 8 sudo usermod -aG dev user1
 9 sudo usermod -aG dev user2~
10 sudo usermod -aG dev user2
11 sudo usermod -aG ops user3
12 sudo mkdir -p /project/dev
13 sudo chown :dev /project/dev
14 sudo chmod 770 /project/dev
15 sudo mkdir -p /project/ops
16 sudo chown :ops /project/ops
17 sudo chmod 770 /project/ops
18 sudo -u user1 touch /project/dev/test1.txt
19 sudo -u user3 ls /project/dev
20 sudo -u user3 touch /project/ops/test3.txt
21 sudo apt install -y nginx
22 sudo systemctl enable nginx
23 sudo systemctl start nginx
24 echo '<h1>Hello, ini website pertama saya!</h1>' | sudo tee /var/www/html
/index.html
25 histroy
26 history
ubuntu@ip-172-31-1-220:~$ date
Fri Dec 12 19:19:55 UTC 2025
ubuntu@ip-172-31-1-220:~$
```