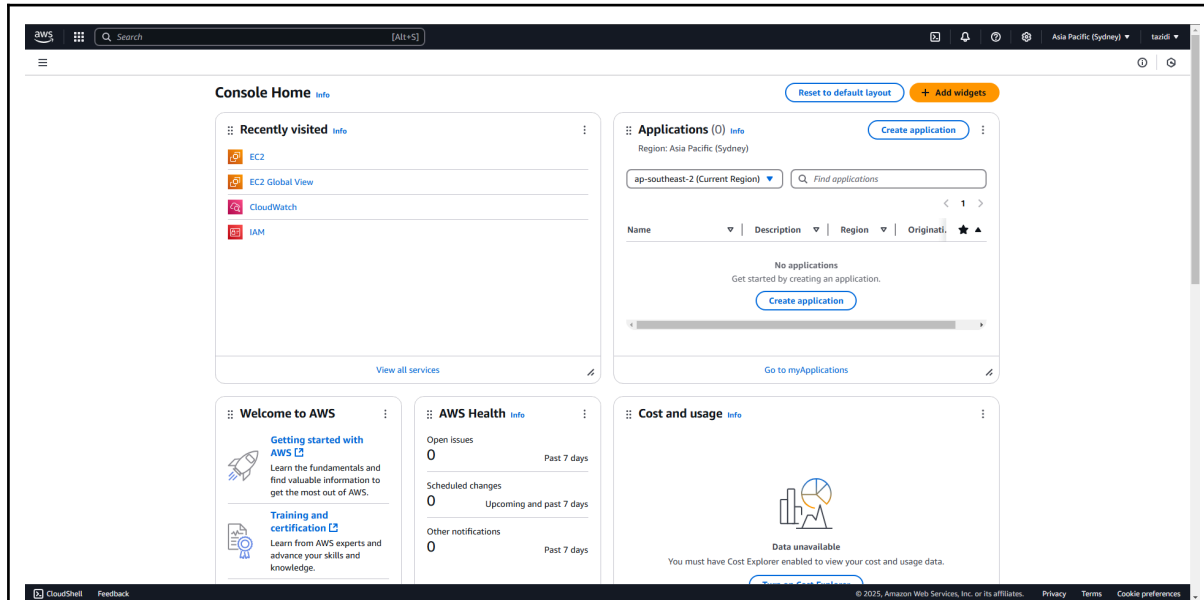
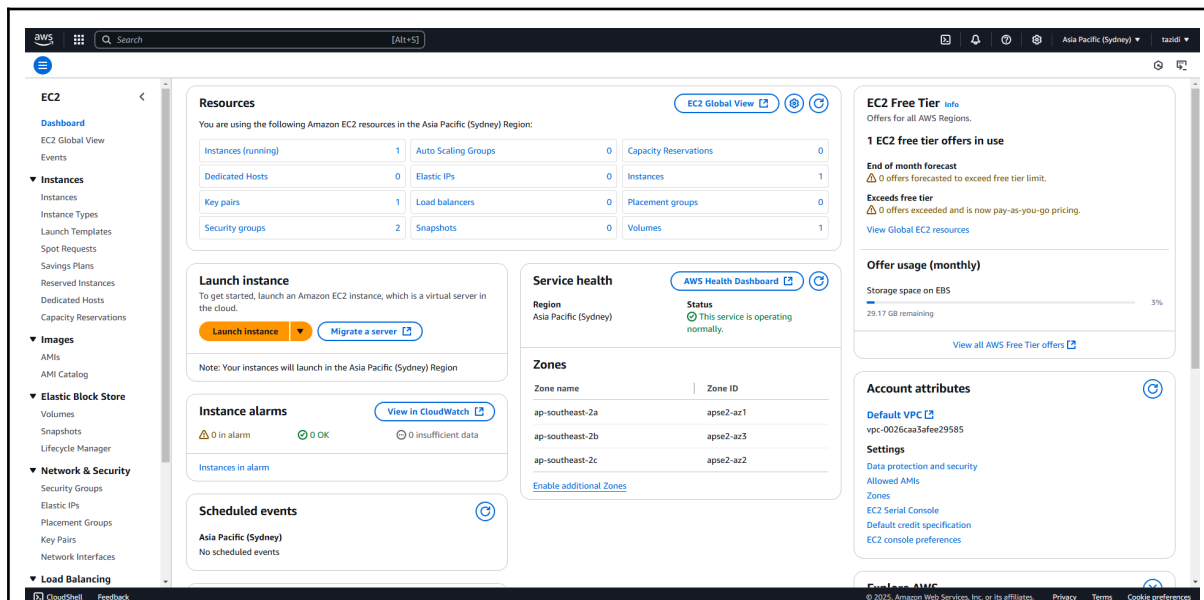


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Kelas: BB

<https://rizkeyawan.my.id/>



Navigasi ke service EC2 di console AWS dapat dilakukan dengan search dibagian header



Tekan "Launch instance" untuk membuat instance baru


```

D:\!Kuliah\Semester 6\Komputasi Awan\Tugas 1>scp -i "D:\!Kuliah\Semester 6\Komputasi Awan\Tugas 1\rizkey1.pem" "D:\!Kuliah\Semester 6\Komputasi Awan\Tugas 1\coba.html" ec2-user@ec2-54-206-118-15.ap-southeast-2.compute.amazonaws.com:~
coba.html                                     100% 1069    9.1KB/s   00:00

D:\!Kuliah\Semester 6\Komputasi Awan\Tugas 1>ssh -i "rizkey1.pem" ec2-user@ec2-54-206-118-15.ap-southeast-2.compute.amazonaws.com

#_
#####
#####\
#####\
\##/
\#/
V~'  '--->
      /
     /m/'

Amazon Linux 2023

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

Last login: Wed Mar  5 11:34:53 2025 from 182.253.194.19
[ec2-user@ip-172-31-2-190 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-2-190 html]$ sudo mv ~/coba.html /var/www/html/index.html
[ec2-user@ip-172-31-2-190 html]$ ls -l
total 4
-rw-rw-r--. 1 ec2-user ec2-user 1069 Mar  5 11:43 index.html
[ec2-user@ip-172-31-2-190 html]$

```

Setelah itu jalankan **cd /var/www/html/** untuk pindah ke directory tersebut lalu jalankan: **sudo mv ~/coba.html /var/www/html/index.html**

Buka kembali lagi AWS Console lalu pada bagian instance terdapat public IPv4, copy IP address tersebut


The screenshot shows the AWS Management Console interface. On the left, the navigation menu includes sections like EC2, Images, Elastic Block Store, Network & Security, and Load Balancing. The main content area displays the 'Instances (1/2)' list. The instance 'Tugas1' (ID: i-01c0dae87eeb6736) is highlighted. Below the list, the 'Details' tab for this instance is open, showing various attributes. The 'Public IPv4 address' is listed as 54.206.118.15, which is the IP address to be copied.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
tazeedee	i-0f29024c4043bb756	Running	t2.micro	2/2 checks passed	View alarms +	ap-southeast-2a	ec2-3-25-246-187.ap-s...	3.25.246.187	-
Tugas1	i-01c0dae87eeb6736	Running	t2.micro	2/2 checks passed	View alarms +	ap-southeast-2a	ec2-54-206-118-15.ap-...	54.206.118.15	-

Instance summary info

- Instance ID:** i-01c0dae87eeb6736
- Public IPv4 address:** 54.206.118.15 | open address
- Private IPv4 addresses:** 172.31.2.190
- Public IPv4 DNS:** ec2-54-206-118-15.ap-southeast-2.compute.amazonaws.com | open address
- Instance state:** Running
- Private IP DNS name (IPv4 only):** ip-172-31-2-190.ap-southeast-2.compute.internal
- Instance type:** t2.micro
- IPv6 address:** -
- Hostname type:** IP name: ip-172-31-2-190.ap-southeast-2.compute.internal
- Answer private resource DNS name:** IPv4 (A)
- Elastic IP addresses:** -

Public IPv4 address
 54.206.118.15 | [open address](#)



[DOMAIN](#)
[HOSTING](#)
[WEBSITE](#)
[LAYANAN](#)
[VPS MURAH](#)
[BLOG](#)
[PROMO](#)

[DASHBOARD](#)
[LAYANAN](#)
[DOMAIN](#)
[TAGIHAN](#)
[AFILIASI](#)
[AKUN](#)

Pengelolaan rizkeyawan.my.id

[Dashboard](#) /
 [Domain Saya](#) /
 [rizkeyawan.my.id](#) /
 Kelola DNS

Kelola

Ringkasan

Nameserver

Kunci Domain

Produk Tambahan

Kontak Domain

Buat Nameserver

DNSSEC

Kelola DNS

Email Forwarding

Kode EPP

Kelola DNS

Nama Host	Jenis Record	Alamat	Prioritas
rizkeyawan.r	A (Address)	54.206.118.15	N/A
e.g. @ for prii	A (Address)	ipv4 e.g. 202.121.232.222	

Simpan

Batal

* Prioritas ini hanya untuk MX Record

Memasukkan Public IPv4 address pada penyedia domain. Pada IDwebhost dapat dilakukan pada sub menu Kelola DNS. opsi lain yang lebih mudah anda dapat melakukannya menggunakan Duck DNS

Langkah selanjutnya kembali ke CLI Amazon Linux

```
[ec2-user@ip-172-31-2-190 ~]$ sudo yum install certbot python3-certbot-apache -y
Last metadata expiration check: 0:39:21 ago on Wed Mar  5 11:12:34 2025.
Dependencies resolved.
=====
Package                                Architecture  Version                                Repository  Size
=====
Installing:
certbot                                noarch        2.6.0-4.amzn2023.0.1                  amazonlinux  49 k
python3-certbot-apache                 noarch        2.6.0-4.amzn2023.0.1                  amazonlinux  287 k
Installed:
augeas-libs-1.13.0-1.amzn2023.0.2.x86_64      certbot-2.6.0-4.amzn2023.0.1.noarch
fontawesome-fonts-1:4.7.0-11.amzn2023.0.2.noarch  fonts-filesystem-1:2.0.5-12.amzn2023.0.2.noarch
mod_ssl-1:2.4.62-1.amzn2023.x86_64             python-josepy-doc-1.13.0-6.amzn2023.noarch
python3-acme-2.6.0-4.amzn2023.0.1.noarch        python3-augeas-1.1.0-10.amzn2023.noarch
python3-certbot-2.6.0-4.amzn2023.0.1.noarch      python3-certbot-apache-2.6.0-4.amzn2023.0.1.noarch
python3-configargparse-1.7-1.amzn2023.noarch     python3-josepy-1.13.0-6.amzn2023.noarch
python3-parsedatetime-2.6-10.amzn2023.noarch     python3-pyOpenSSL-21.0.0-1.amzn2023.0.2.noarch
python3-pyrfc3339-1.1-16.amzn2023.noarch         sscg-3.0.3-76.amzn2023.x86_64
Complete!
```

Lalu install Certbot dengan perintah:
 sudo yum install certbot python3-certbot-apache -y

```
[ec2-user@ip-172-31-2-190 ~]$ sudo certbot --apache
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Enter email address (used for urgent renewal and security notices)
(Enter 'c' to cancel): rizki.tazidi@gmail.com

-----
Please read the Terms of Service at
https://letsencrypt.org/documents/LE-SA-v1.5-February-24-2025.pdf. You must
agree in order to register with the ACME server. Do you agree?
-----
(Y)es/(N)o: y

-----
Would you be willing, once your first certificate is successfully issued, to
share your email address with the Electronic Frontier Foundation, a founding
partner of the Let's Encrypt project and the non-profit organization that
develops Certbot? We'd like to send you email about our work encrypting the web,
EFF news, campaigns, and ways to support digital freedom.
-----
(Y)es/(N)o: y
Account registered.
Please enter the domain name(s) you would like on your certificate (comma and/or
space separated) (Enter 'c' to cancel): rizkeyawan.my.id
Requesting a certificate for rizkeyawan.my.id
Unable to find a virtual host listening on port 80 which is currently needed for Certbot to prove to the CA that you con
trol your domain. Please add a virtual host for port 80.
Ask for help or search for solutions at https://community.letsencrypt.org. See the logfile /var/log/letsencrypt/letsencr
ypt.log or re-run Certbot with -v for more details.
[ec2-user@ip-172-31-2-190 ~]$
```

***Disarankan untuk dilewati**

Jika sudah berhasil install certbot lalu jalankan perintah:

Sudo certbot --apache (akan terjadi error karena belum dibuatkan config seperti pada gambar selanjutnya)

Jalankan perintah sudo nano /etc/httpd/conf.d/rizkeyawan.my.id.conf

```
GNU nano 5.8 /etc/httpd/conf.d/rizkeyawan.my.id.conf
<VirtualHost *:80>
    ServerName yourdomain.com
    ServerAlias www.yourdomain.com
    DocumentRoot /var/www/html

    <Directory /var/www/html>
        AllowOverride All
    </Directory>

    ErrorLog /var/log/httpd/error.log
    CustomLog /var/log/httpd/access.log combined
</VirtualHost>
```

Setelah jalankan perintahnya lalu copy teks dibawah:

```
<VirtualHost *:80>
    ServerName yourdomain.com
    ServerAlias www.yourdomain.com
    DocumentRoot /var/www/html

    <Directory /var/www/html>
        AllowOverride All
    </Directory>

    ErrorLog /var/log/httpd/error.log
    CustomLog /var/log/httpd/access.log combined
```

</VirtualHost>

Setelah itu tekan ctrl+x, y, enter

```
[ec2-user@ip-172-31-2-190 ~]$ sudo certbot --apache -d rizkeyawan.my.id
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Requesting a certificate for rizkeyawan.my.id

Successfully received certificate.
Certificate is saved at: /etc/letsencrypt/live/rizkeyawan.my.id/fullchain.pem
Key is saved at: /etc/letsencrypt/live/rizkeyawan.my.id/privkey.pem
This certificate expires on 2025-06-03.
These files will be updated when the certificate renews.
Certbot has set up a scheduled task to automatically renew this certificate in the background.

Deploying certificate
Successfully deployed certificate for rizkeyawan.my.id to /etc/httpd/conf.d/rizkeyawan.my.id-le-ssl.conf
Congratulations! You have successfully enabled HTTPS on https://rizkeyawan.my.id

-----
If you like Certbot, please consider supporting our work by:
* Donating to ISRG / Let's Encrypt: https://letsencrypt.org/donate
* Donating to EFF: https://eff.org/donate-le
-----
[ec2-user@ip-172-31-2-190 ~]$ |
```

Jalankan lagi sudo certbot --apache -d rizkeyawan.my.id -> langsung saja masukkan nama domainnya

```
[ec2-user@ip-172-31-2-190 ~]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-2-190 ~]$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Wed 2025-03-05 12:03:23 UTC; 24s ago
     Docs: man:httpd.service(8)
  Main PID: 31248 (httpd)
    Status: "Total requests: 4; Idle/Busy workers 100/0; Requests/sec: 0.211; Bytes served/sec: 738 B/sec"
    Tasks: 230 (limit: 1111)
   Memory: 17.8M
      CPU: 85ms
   CGroup: /system.slice/httpd.service
           └─31248 /usr/sbin/httpd -DFOREGROUND
             └─31250 /usr/sbin/httpd -DFOREGROUND
               └─31251 /usr/sbin/httpd -DFOREGROUND
                 └─31252 /usr/sbin/httpd -DFOREGROUND
                   └─31253 /usr/sbin/httpd -DFOREGROUND
                     └─31429 /usr/sbin/httpd -DFOREGROUND

Mar 05 12:03:22 ip-172-31-2-190.ap-southeast-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Se
Mar 05 12:03:23 ip-172-31-2-190.ap-southeast-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Ser
Mar 05 12:03:23 ip-172-31-2-190.ap-southeast-2.compute.internal httpd[31248]: Server configured, listening on: port 443
lines 1-20/20 (END)
```

Pada tahap akhir lakukan sudo systemctl restart httpd dan sudo systemctl status httpd. Langkah ini dilakukan untuk me-restart layanan Apache (httpd) setelah mengubah konfigurasi, termasuk setelah mengedit ssl.conf. Lalu pada status untuk mengecek status layanan Apache HTTP Server (httpd) berjalan normal atau tidak

Setelah selesai semua tahapan maka mengamankan Aplikasi dengan HTTPS berhasil dan juga sudah tidak akan muncul peringatan di browser.

<https://rizkeyawan.my.id/>