Create Virtual Machine

Sure! Let’s make your EC2 and name it **finmars-platform-vm**. Follow these steps:

1. **Sign in to AWS**
   - Open your browser and go to console.aws.amazon.com.
   - Enter your AWS email and password.
2. **Open EC2**
   - At the top, click the search box and type **EC2**.
   - Click **EC2** under “Services.”
3. **Launch a new instance**
   - Click the blue **Launch instances** button.
4. **Name your instance**
   - In the **Name tag** box, type **finmars-platform-vm**.
5. **Choose AMI (Ubuntu 24.04)**
   - Scroll or search for **Ubuntu Server 24.04 LTS**.
   - Pick 64-bit (x86) (should be default)
   - Click **Select**.
6. **Select instance type (4 vCPU, 16 GiB RAM)**
   - Find and click **t3.xlarge** (it has 4 vCPU and 16 GiB).
7. **Create or select key pair**
   - Choose **Create a new key pair**.
   - Name it (e.g. **finmars-platform-vm-key**).
   - Click **Create Key Pair** and save the `.pem` file safely. - Do not Lose this file, if you lose it, you will not able to connect to your VM again
8. **Configure instance details**
   - Under **Subnet**, pick one (any is fine).
   - Subnet - Default is ok (or do accordingly to your network configuration)
   - Turn **Auto-assign Public IP** to **Enable**. (If already enabled - OK)
   - Turn on checkbox **Allow SSH traffic from**
   - Turn on checkbox **Allow HTTPS traffic from the internet**
   - Turn on checkbox **Allow HTTP traffic from the internet**
   - Leave the rest as default.
   - Click **Next: Add Storage**.
9. **Add storage (256 GiB)**
   - Change the size from **8** to **256** in the root volume row.
   - Keep the volume type as **gp3** or **gp2**.
10. **Review and launch**
    - Check all your settings.
    - Click **Launch Instance**.
11. **Wait for your VM**
    - Click **View Instances**.

- Wait until its status is **running** and checks pass.

12. **Connect to your VM**
    - Select the instance named **finmars-platform-vm**.
    - Click **Connect**.
    - Follow the instructions, for example:

```
# Move your Download key file to secure folder (~/Downloads not recommended)


# if this first connect
chmod 400 "finmars-platform-vm.pem"
ssh -i ./finmars-platform-vm.pem ubuntu@<Public-IP>



# if this first connect
# Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
# yes
```

Your EC2 named **finmars-platform-vm** is ready! □□

Now you need to assign your Public IP of your freshly created VM to subdomain of your domain.

1. **Sign in to AWS**

   Go to console.aws.amazon.com and log in.
2. **Open Route 53**
   In the top search bar, type **Route 53**, then click the service.
3. **Go to Hosted Zones**
   In the left menu, click **“Hosted zones.”**
4. **Select your domain**
   Find and click the zone named your_domain.tld (for example, `example.com`).
5. **Create the first record**
   - Click **“Create record.”**
   - In **Record name**, type `finmars` (so full name is `finmars.example.com`). - It is Record for Actual Finmars Platform
   - For **Record type**, choose **A – IPv4 address**.
   - In **Value**, type your EC2 public IP (for example, `203.0.113.25`). You can find it in EC2 details
   - Leave **TTL** as default (300).
   - Click **“Create records.”**
6. **Create the second record**
   - Click **“Create record”** again.
   - In **Record name**, type `finmars-auth`(so full name is `finmars-auth.example.com`). - It is Record for Single-Sign-On (SSO) Finmars

- For **Record type**, choose **A – IPv4 address**.
- In **Value**, type the same EC2 public IP.
- Click **“Create records.”**

7. **Wait a few minutes**
   DNS needs a little time to spread out. After about 5 minutes, both
   - `finmars.example.com`
   - `finmars-auth.example.com`

     will go to your VM’s public IP.

That’s it! Now both sub-domains point to your **finmars-platform-vm** server.

You can verify it by run following command in Terminal (On Mac or Linux)

```
dig finmars.example.com
dig finmars-auth.example.com
```

Output should be like:

```
; <<>> DiG 9.10.6 <<>> finmars.example.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 39082
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;finmars-platform-vm.finmars.com. IN A

;; ANSWER SECTION:
finmars.example.com. 300 IN A 203.0.113.25

;; Query time: 12 msec
;; SERVER: 192.168.178.1#53(192.168.178.1)
;; WHEN: Wed Jun 11 20:10:02 CEST 2025
;; MSG SIZE  rcvd: 76
```

Now go to next step: Install Finmars Platform

Revision #18
Created 8 June 2025 10:28:16 by Sergei Zhitenev
Updated 12 June 2025 10:45:52 by Sergei Zhitenev