Amazon Web Services Setup

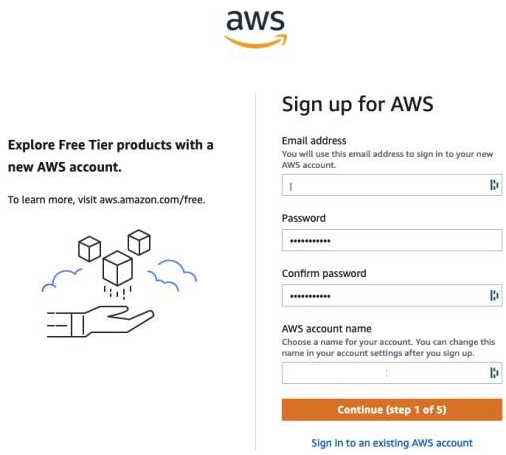
This tutorial teaches you how to set up a server on Amazon Web Services. You will be doing all of your remaining assignments on your server.

1. Create an AWS Account

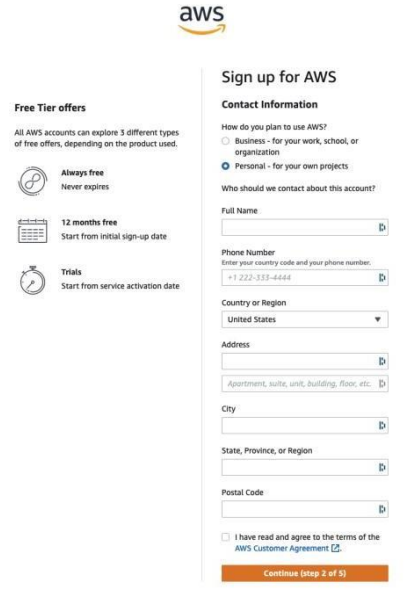
Go to the following URL:

https://aws.amazon.com

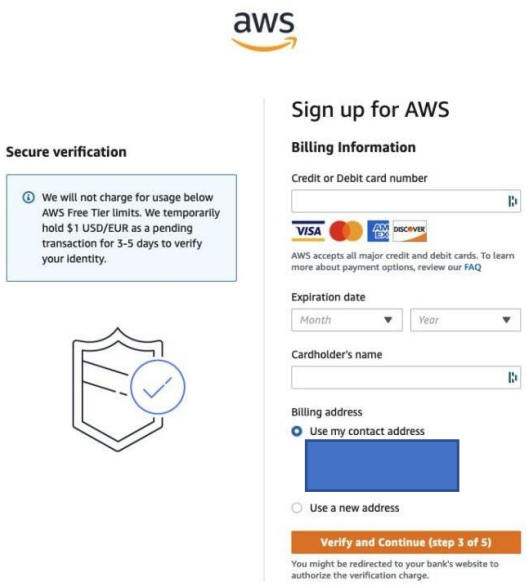
Click on the orange button labeled **Create and AWS Account**.



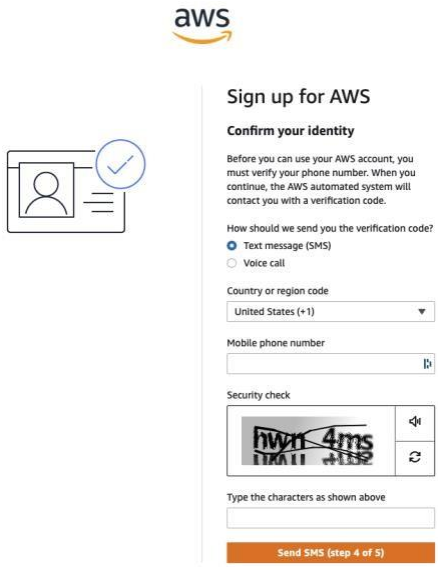
Fill in the requested information under **Sign up for AWS** and click on **Continue**. Any valid e-mail account is OK. A CAPcha security check will be displayed. The Contact Information form is displayed.



Select **Personal** and enter the rest of the requested information. Also check the Terms checkbox. Click **Continue**. The **Billing Information** for is displayed.

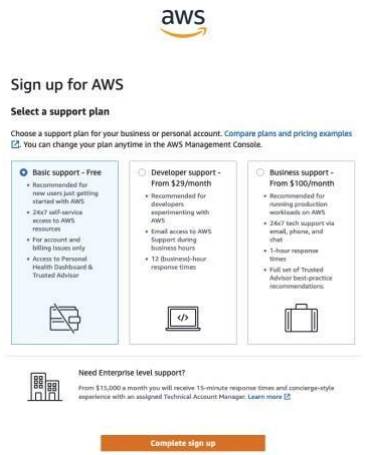


Enter your credit card information and click **Verify and Continue**. Notice that a $1 temporary hold will be made to your credit card for verification purpose. The **Confirm your identity** form is displayed.



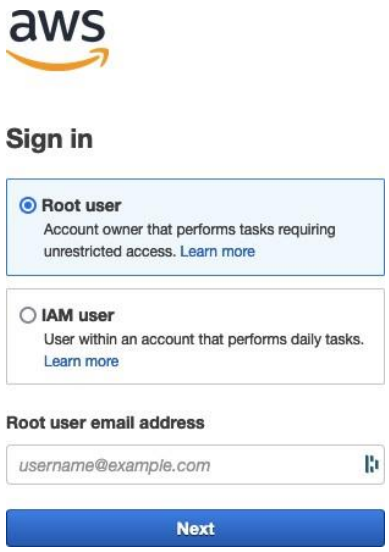
Enter your phone number, the characters shown in the security check, and click **SendSMS**, or **Call me now**. The **Confirm your identity** form is displayed.

Enter the code you received by SMS or voice call and click **Continue**. The **Select asupport plan** form is displayed.



Select **Basic support – free** and click **Complete sign up**. The **Congratulations!** page will be shown.

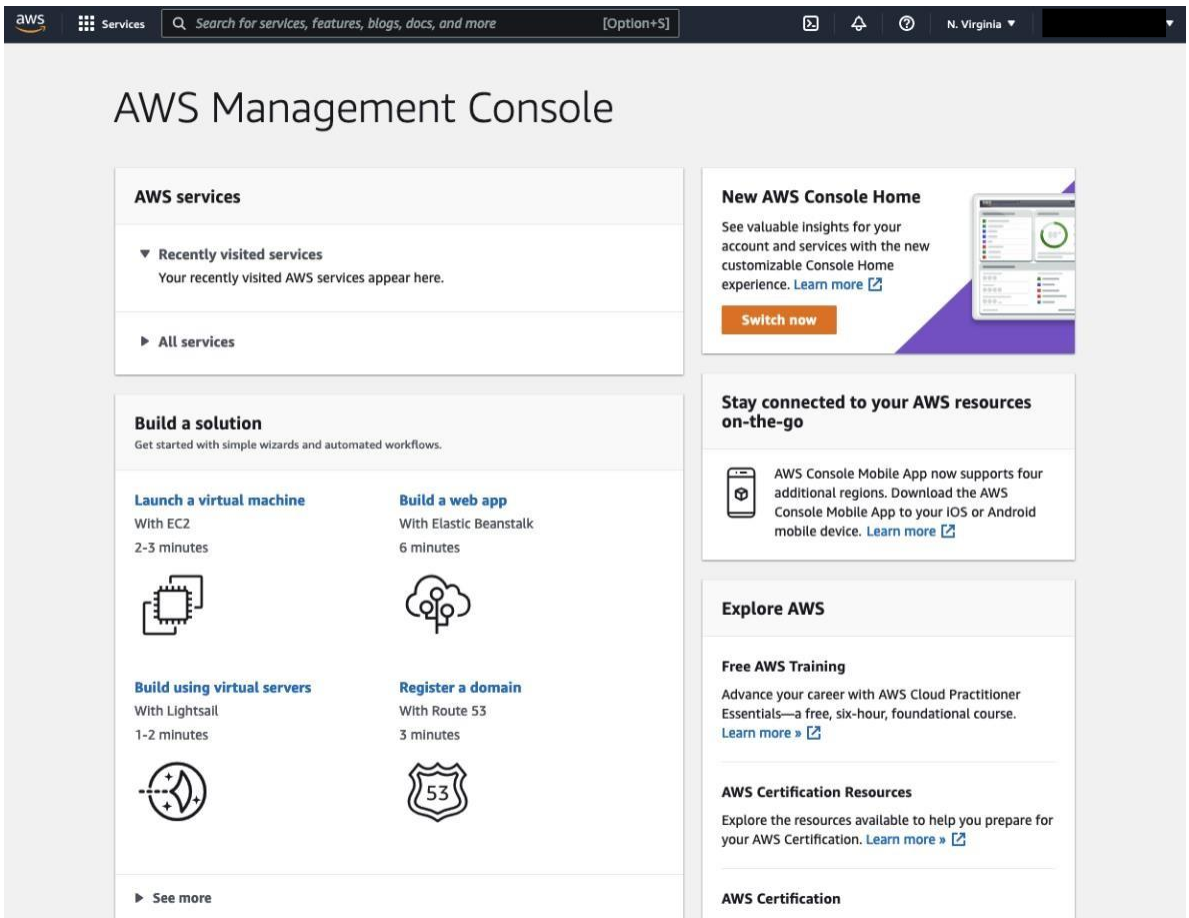
Wait a few minutes for your account to be activated, then click on **Go to the AWS Management Console**. The AWS **Sign in** form is displayed.



Select **Root user** and enter your e-mail address. Click **Next**. The **Security check** form isdisplayed.

Enter the characters in the image and click **Submit**. The Root user sign in form is displayed.

Enter your password. Click **Sign in**. The **AWS Management Console** will be displayed.



On the top right corner, you can find:

1) Your account name – for example cs351-Fall2023
2) AWS Deployment Region – US East (N.Virginia), or **us-east-1**

2. Set up the Default EC2

- Click the top left menu named **Services**
- From the list of Amazon Web Services, select **EC2,** under **Compute**.

3. Creating a Server

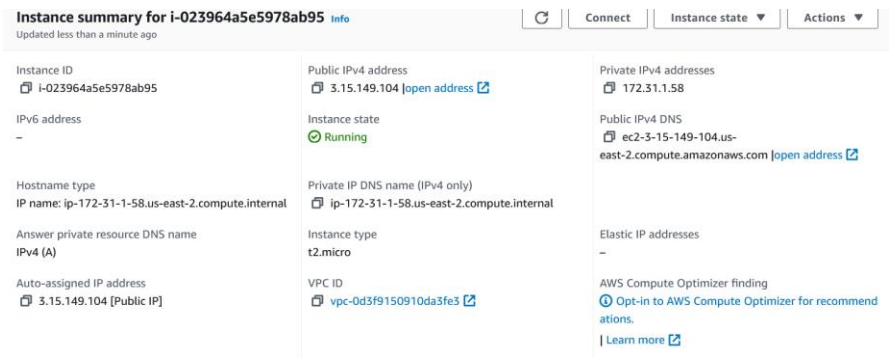
- Click the EC2 tab or Launch A Virtual Machine.
- Click the “Launch Instance” Button.
- Make sure Amazon Linux 2023 is selected (Free tier eligible).
- Make sure that the type is **t2.micro**. (Anything larger and you get charged.)
- Create a key pair to securely connect to your instance
- Under Network Settings, add a rule for
  HTTP Protocol: TCP, Port Range: 80 and Source: 0.0.0.0/0, ::/0
  The SSH rule with source 0.0.0.0/0 means that any computer can access the server.

- Click on Launch Instance

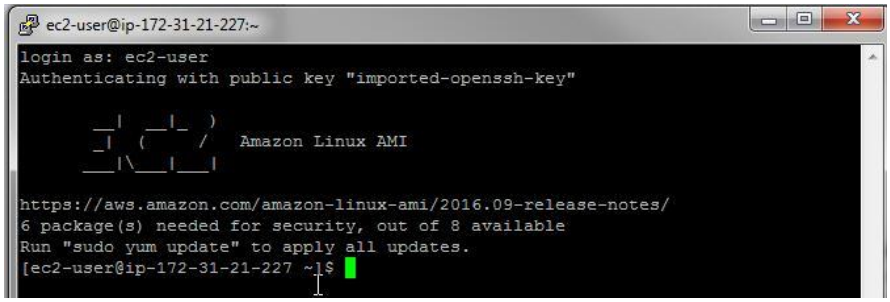
- After a few minutes, your instance will be created. You can check the status on the Instance Status page (Select Instances under INSTANCES in the left navigation bar).

4. Connecting to and Setting Up Your Server

- Make sure you are signed in and in the EC2 tab.
- Select Instances under INSTANCES in the left navigation bar.
- Click on your server.
- The box at the bottom of the page should be open to the Description tab. Note the Public DNS value towards the top right of it.



- If you are on a non-Windows system, open Terminal for Mac or Linux. Use the command line argument ssh -i /path/to/my/keyfile.pem ec2-user@ec2-##-##-##-###.compute-#.amazonaws.com, where /path/to/my/keyfile.pem is the path to the key file you downloaded and ec2-##-##-##-###.compute-#.amazonaws.com is the Public DNS value. Remember to put a space after -i and DO NOT put a space between ec2-user@ and your Public DNS value.
- If you are using Windows:
    - Download PuTTY and PuTTYgen if you do not already have it.
    - Open PuTTYgen by going to Start -> Programs -> WinSCP -> Key tools -> PuTTYgen.
    - Select Conversions -> Import Key and find your file.
    - Click Save private key. Name it something like myKeyPair, and make sure the type is *.ppk. You will get a warning, but just click Yes.
    - Close PuTTYgen and open PuTTY and go to Connection -> SSH -> Auth in the left navigation bar.
    - Click the Browse button near the bottom of the page and select your *.ppk file.
    - Go back to the Session page and save the configuration so you don't have to find the key every time you log in.
    - Now sign in as ec2-user@ec2-##-##-##-###.compute-#.amazonaws.com, where ec2-##-##-##-###.compute-#.amazonaws.com is the Public DNS value.



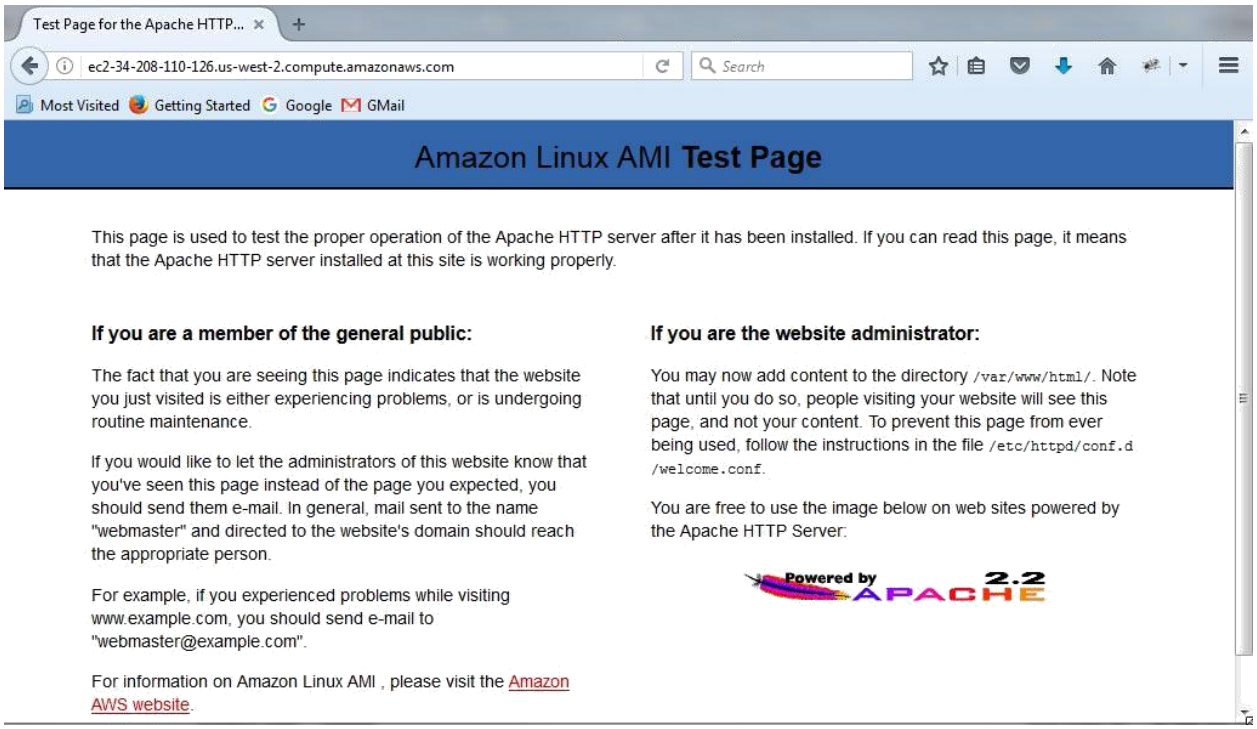
- Install the appropriate packages on the server using the following commands (where 'password' is whatever you want your mysql password to be):

```
sudo su
yum install httpd
yum install mysql-server mysql
yum install php php-mysql
service httpd start
service mysqld start
/usr/bin/mysqladmin -u root password 'password'
```

- Use the this commands to give yourself permission to upload your files to your server:

```
cd ../../var/www
chown ec2-user html/
```

- To make sure the server is working, type http://ec2-##-##-##-###.compute-#.amazonaws.com into your web browser, where ec2-##-##-##-###.compute-#.amazonaws.com is the Public DNS value. You should see a test page (below). If your browser times out, go to Security Groups in the left navigation bar on your AWS EC2 tab and make sure the security group you set up for your server has the http rule. If not, add it and don't forget to click the Apply Rule Changes button.


Test Page for the Apache HTTP...
ec2-34-208-110-126.us-west-2.compute.amazonaws.com
Search
Most Visited
Getting Started
Google
GMail
Amazon Linux AMI Test Page
This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.
If you are a member of the general public:
The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.
If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.
For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".
For information on Amazon Linux AMI , please visit the Amazon AWS website.
If you are the website administrator:
You may now add content to the directory /var/www/html/. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file /etc/httpd/conf.d/welcome.conf.
You are free to use the image below on web sites powered by the Apache HTTP Server:
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