

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**.



Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.



Sign up for AWS

Email address
You will use this email address to sign in to your new AWS account.

Password


Confirm password

AWS account name
Choose a name for your account. You can change this name in your account settings after you sign up.

Continue (step 1 of 5)




[Sign in to an existing 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.



Free Tier offers

All AWS accounts can explore 5 different types of free offers, depending on the product used.

-  **Always free**
Never expires
-  **12 months free**
Start from initial sign-up date
-  **Trials**
Start from service activation date

Sign up for AWS

Contact Information

How do you plan to use AWS?

☐ Business - for your work, school, or organization

☒ Personal - for your own projects

Who should we contact about this account?

Full Name

Phone Number
Enter your country code and your phone number:

Country or Region

Address

Apartment, suite, unit, building, floor, etc.

City


State, Province, or Region

Postal Code


☐ I have read and agree to the terms of the [AWS Customer Agreement](#)


Continue (step 2 of 5)

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




Secure verification




 We will not charge for usage below AWS Free Tier limits. We temporarily hold \$1 USD/EUR as a pending transaction for 3-5 days to verify your identity.



Sign up for AWS


Billing Information


Credit or Debit card number 




AWS accepts all major credit and debit cards. To learn more about payment options, review our [FAQ](#)


Expiration date

Month 

Year 

Cardholder's name 

Billing address


☒ Use my contact address 

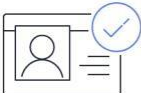
☐ Use a new address

Verify and Continue (step 3 of 5)

You might be redirected to your bank's website to authorize the verification charge.

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.





Sign up for AWS

Confirm your identity


Before you can use your AWS account, you must verify your phone number. When you continue, the AWS automated system will contact you with a verification code.


How should we send you the verification code?

☒ Text message (SMS)



☐ Voice call

Country or region code

United States (+1) 

Mobile phone number 

Security check



Type the characters as shown above

Send SMS (step 4 of 5)

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.





Sign up for AWS

Confirm your identity

Verify code

5149 

Continue (step 4 of 5)

Having trouble? Sometimes it takes up to 10 minutes to retrieve a verification code. If it's been longer than that, [return to the previous page](#) and try again.

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



Sign up for AWS

Select a support plan

Choose a support plan for your business or personal account. [Compare plans and pricing examples](#)
🔗 You can change your plan anytime in the AWS Management Console.

| | | |
|---|---|--|
| <p><input checked="" type="radio"/> Basic support - Free</p> <ul style="list-style-type: none">Recommended for new users just getting started with AWS24x7 self-service access to AWS resourcesFor account and billing issues onlyAccess to Personal Health Dashboard & Trusted Advisor  | <p><input type="radio"/> Developer support - From \$29/month</p> <ul style="list-style-type: none">Recommended for developers experimenting with AWSEmail access to AWS Support during business hours12 Business-hour response times  | <p><input type="radio"/> Business support - From \$100/month</p> <ul style="list-style-type: none">Recommended for running production workloads on AWS24x7 tech support via email, phone, and chat1-hour response timesFull set of Trusted Advisor best practice recommendations  |
|---|---|--|

 **Need Enterprise level support?**
From \$15,000 a month you will receive 15-minute response times and concierge-style experience with an assigned Technical Account Manager. [Learn more](#)

[Complete sign up](#)

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




Congratulations!

Thank you for signing up with AWS.

We are activating your account, which should take a few minutes. You will receive an email when this is complete.

[Go to the AWS Management Console](#)

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.



Sign in

☒ **Root user**

Account owner that performs tasks requiring unrestricted access. [Learn more](#)

☐ **IAM user**

User within an account that performs daily tasks. [Learn more](#)

Root user email address

[Next](#)

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



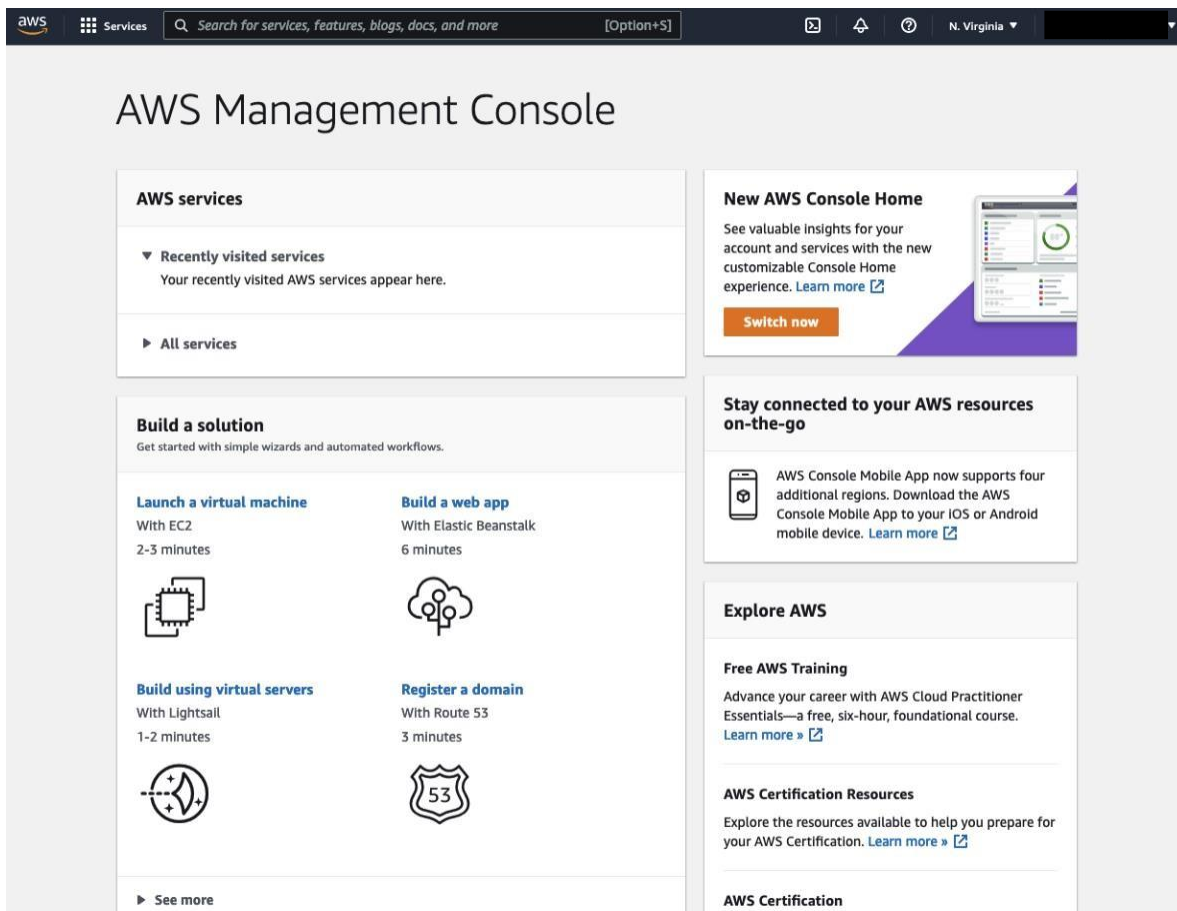
The image shows the AWS Security check form. At the top is the AWS logo. Below it is the heading "Security check". The main content area contains a CAPTCHA challenge with the text "Type the characters seen in the image below". The image shows the characters "yt4dx2" with some noise. Below the image is a text input field containing "yt4dx2". To the right of the input field are two buttons: a speaker icon for audio and a circular arrow icon for refresh. Below the input field is a blue "Submit" button.

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



The image shows the AWS Root user sign in form. At the top is the AWS logo. Below it is the heading "Root user sign in". Underneath is the label "Email:" followed by a text input field. Below that is the label "Password:" followed by a text input field and a link "Forgot password?". At the bottom is a blue "Sign in" button.

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



The image shows the AWS Management Console dashboard. At the top is a navigation bar with the AWS logo, a "Services" link, a search bar, and a dropdown menu for the region "N. Virginia". The main content area is titled "AWS Management Console". It features several sections: "AWS services" with a "Recently visited services" list and a link to "All services"; "Build a solution" with four quickstart options: "Launch a virtual machine" (With EC2, 2-3 minutes), "Build a web app" (With Elastic Beanstalk, 6 minutes), "Build using virtual servers" (With Lightsail, 1-2 minutes), and "Register a domain" (With Route 53, 3 minutes); "New AWS Console Home" with a "Switch now" button; "Stay connected to your AWS resources on-the-go" with a link to the AWS Console Mobile App; and "Explore AWS" with links to "Free AWS Training", "AWS Certification Resources", and "AWS Certification".

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

✓ **Success**
Successfully initiated launch of instance (i-023964a5e5978ab95)

- 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).

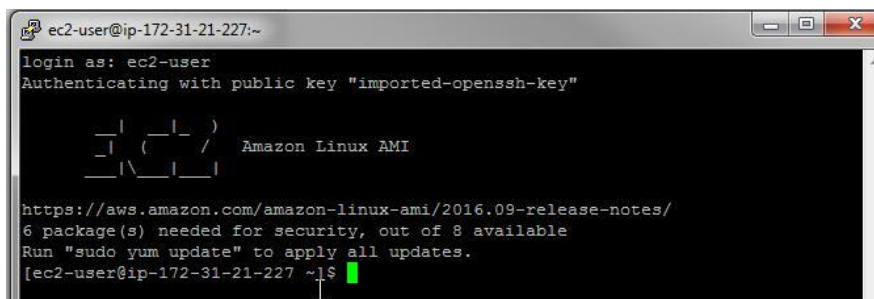
4. Connecting to and Setting Up Your Server

- 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.

Instance summary for i-023964a5e5978ab95 [info](#) Updated less than a minute ago Refresh Connect Instance state Actions

| | | |
|--|---|---|
| Instance ID i-023964a5e5978ab95 | Public IPv4 address 3.15.149.104 open address | Private IPv4 addresses 172.31.1.58 |
| IPv6 address - | Instance state Running | Public IPv4 DNS ec2-3-15-149-104.us-east-2.compute.amazonaws.com open address |
| Hostname type IP name: ip-172-31-1-58.us-east-2.compute.internal | Private IP DNS name (IPv4 only) ip-172-31-1-58.us-east-2.compute.internal | Elastic IP addresses - |
| Answer private resource DNS name IPv4 (A) Auto-assigned IP address 3.15.149.104 [Public IP] | Instance type t2.micro VPC ID vpc-0d3f9150910da3fe3 open address | AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more |

- 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.

