

Create and set up an AWS account and a Virtual Machine

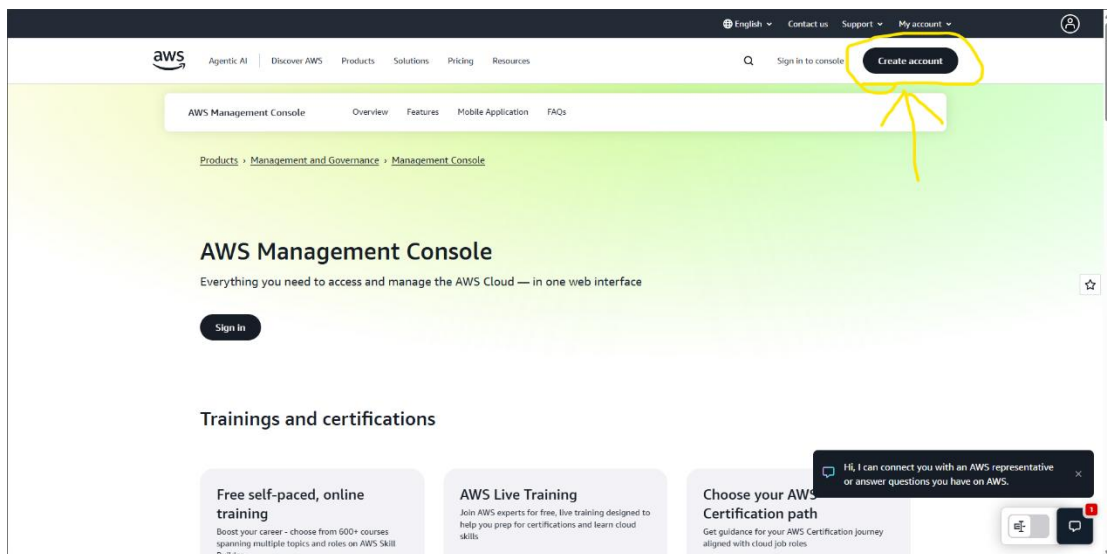
This tutorial will help you set up your AWS account and create a lightweight virtual machine. You will not need anything extra to set this up.

NOTE: As of July 2025, AWS changed its 12-month free tier to 6 months with up to \$200 in credits. The account will auto-close in 6 months or when all credits are used up. You can change to a paid plan anytime.

All you will need is:

1. An email address to create an AWS account.
2. A debit or credit card to put on file (**NOTE:** They will not charge you if you do not exceed any limits of free services or create something that is out of the scope of the free tier.)

1. Go to [AWS Management Console](https://aws.amazon.com/console/) (<https://aws.amazon.com/console/>) and click on Create account.



2. Enter the email you want to use for the account, as well as an AWS account name. You can put whatever you want for the name. Click Verify email address.

Language
English ▼

aws

Try AWS at no cost for up to 6 months

Start with USD \$100 in AWS credits, plus earn up to USD \$100 by completing various activities.



Sign up for AWS

Root user email address
Used for account recovery and as described in the [AWS Privacy Notice](#)

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

Verify email address

OR

Sign in to an existing AWS account

Privacy Policy | Terms of Use

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3. They will send a confirmation email to the email you registered back in step 2. Check your email for a verification code and enter it here.

aws

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Sign up for AWS

Confirm you are you

Making sure you are secure -- it's what we do.

We sent an email with a verification code to **reddragon@rdproductions.cc**. (not you?)

Enter it below to confirm your email.

Verification code

A verification code is required.

Verify

Resend Code

Didn't get the code?

- Codes can take up to 5 minutes to arrive.
- Check your spam folder.

- Once verification has been accepted, you will be prompted to create a password. Once you have made a password, click continue.

The screenshot shows the AWS sign-up page. On the left, there's a promotional banner for 'Try AWS at no cost for up to 6 months' with a rocket icon. The main heading is 'Sign up for AWS'. Below it, a green box confirms email verification. The 'Create your password' section has two input fields for 'Root user password' and 'Confirm root user password', with yellow arrows pointing to them. Below these fields is an orange 'Continue (step 1 of 5)' button. At the bottom, there's a link to 'Sign in to an existing AWS account'.

- AWS will ask you to choose between the free plan and the paid plan. For now, select the free option and continue.
- Choose the personal option and fill out the info below. Check the box that says you agree to the terms and click continue.

The screenshot shows the second step of the AWS sign-up process, 'Contact Information'. On the left, there's a banner for 'Earn additional AWS credits' with a dollar bill icon. The main heading is 'Sign up for AWS'. Below it, the 'Contact Information' section asks 'How do you plan to use AWS?' with two radio button options: 'Business' and 'Personal - for your own projects'. A yellow arrow points to the 'Personal' option. Below this, it asks 'Who should we contact about this account?' with a 'Full Name' input field. A red error message 'A full name is required.' is shown. Below the name field are input fields for 'Country Code' (set to '+1'), 'Phone Number' (set to '202-555-4444'), 'Country or Region' (set to 'United States'), 'Address line 1', 'Address line 2' (with a placeholder 'Apartment, suite, unit, building, floor, etc.'), 'City', 'State, Province, or Region', and 'Postal Code'. At the bottom, there's a checkbox for 'I have read and agree to the terms of the AWS Customer Agreement' and an orange 'Agree and Continue (step 2 of 5)' button. Yellow arrows point to the 'Personal' option, the 'Full Name' field, the 'Agree and Continue' button, and the 'Address line 1' field.

7. This is the part where they will ask you for your card information. If you selected the free tier option, they will not charge your card. Fill out the info and click verify and continue.

The screenshot shows the 'Sign up for AWS' page, specifically the 'Billing Information' section. On the left, there is a blue box titled 'What you'll pay' with an information icon. It states: 'Our verification process holds USD \$1 (or equivalent) for 3-5 days to verify your account and prevent fraud. If you selected a free plan, you will not incur charges until you upgrade to a paid plan. For paid plans, you'll be billed and charged monthly for any usage beyond Free Tier limits, or when Free Tier offers expire, at the rates on the AWS Pricing page. You can view your costs, manage usage, terminate resources, or close your account at any time through the AWS Management Console.' Below this box is a shield icon with a checkmark. The main form area is titled 'Sign up for AWS' and 'Billing Information'. It includes a 'Billing country' dropdown set to 'United States'. Below that is a 'Credit or Debit card number' field, followed by logos for VISA, Mastercard, AMEX, and Discover. A note states: 'AWS accepts most major credit and debit cards. To learn more about payment options, review our FAQ.' The 'Expiration date' section has 'Month' and 'Year' dropdowns. The 'Security code' field is labeled 'CVV/CVC'. The 'Cardholder's name' field is below that. The 'Billing address' section has two radio buttons: 'Use my contact address' (selected) and 'Use a new address'. The 'Use my contact address' option has a blacked-out address. At the bottom of the form is an orange button labeled 'Verify and continue (step 3 of 5)'. A yellow bracket and arrow point to the card number, expiration date, security code, and cardholder's name fields. The footer of the page features a decorative graphic of blue wireframe cubes.

8. Enter your mobile phone number and click on send SMS.

The screenshot shows the 'Sign up for AWS' page, specifically the 'Confirm your identity' section. On the left, there is a blue box with an icon of a person's head and shoulders with a checkmark. The main form area is titled 'Sign up for AWS' and 'Confirm your identity'. It includes a note: '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.' Below this is a section 'How should we send you the verification code?' with two radio buttons: 'Text message (SMS)' (selected) and 'Voice call'. The 'Country or region code' dropdown is set to 'United States (+1)'. The 'Mobile phone number' field is below that. At the bottom of the form is an orange button labeled 'Send SMS (step 4 of 5)'. A yellow bracket and arrow point to the country code and mobile phone number fields. The footer of the page features a decorative graphic of blue wireframe cubes and a footer bar with links for 'Privacy Policy', 'Terms of Use', 'Cookie Preferences', and 'Sign Out', followed by the text 'Amazon Web Services, Inc. or its affiliates. All rights reserved.'

9. Enter the code you received in SMS here.



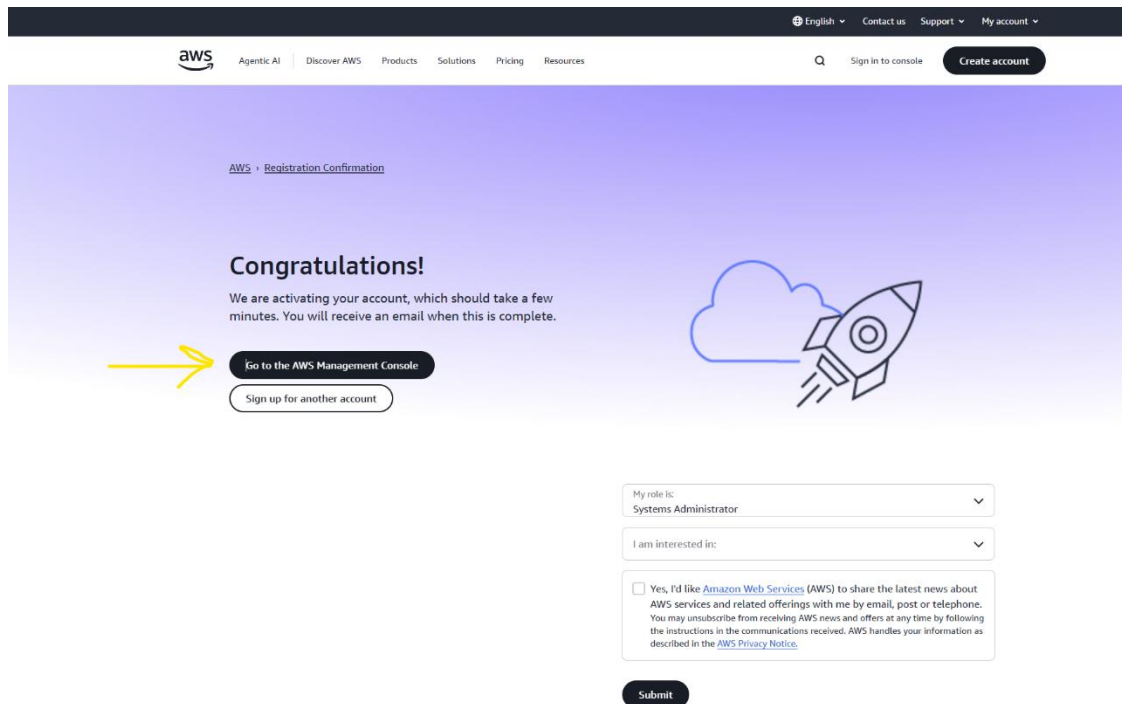
The screenshot shows the AWS sign-up page for confirming identity. At the top is the AWS logo. Below it, the heading "Sign up for AWS" is followed by "Confirm your identity". To the left of the form is an icon of a person with a checkmark. The form has a "Verify code" input field and a "Continue (step 4 of 5)" button. A yellow arrow points to the input field. Below the button is a link: "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." At the bottom, there are links for "Privacy Policy", "Terms of Use", "Cookie Preferences", and "Sign Out", along with a footer: "Amazon Web Services, Inc. or its affiliates. All rights reserved."

10. In this step, they may ask you to select a support plan. Choose the basic support plan and click complete sign up.



The screenshot shows the AWS sign-up page for selecting a support plan. At the top is the AWS logo. Below it, the heading "Sign up for AWS" is followed by "Select a support plan". Below this is a link: "Choose a support plan for your business or personal account. Compare plans and pricing examples" and a note: "You can change your plan anytime in the AWS Management Console." There are three plan options: "Basic support - Free" (selected), "Developer support - From \$29/month", and "Business support - From \$100/month". Each option has a list of features and an icon. A yellow arrow points to the "Basic support - Free" option. Below the plans is a section for "Need Enterprise level support?" with a link to "Learn more". At the bottom is a "Complete sign up" button. A yellow arrow points to the button. At the bottom, there are links for "Privacy Policy", "Terms of Use", "Cookie Preferences", and "Sign Out", along with a footer: "Amazon Web Services, Inc. or its affiliates. All rights reserved."

11. You should arrive on a page that says Congratulations. Underneath that, you should see a button that says, “Go to the AWS Management Console”. Click on that button.

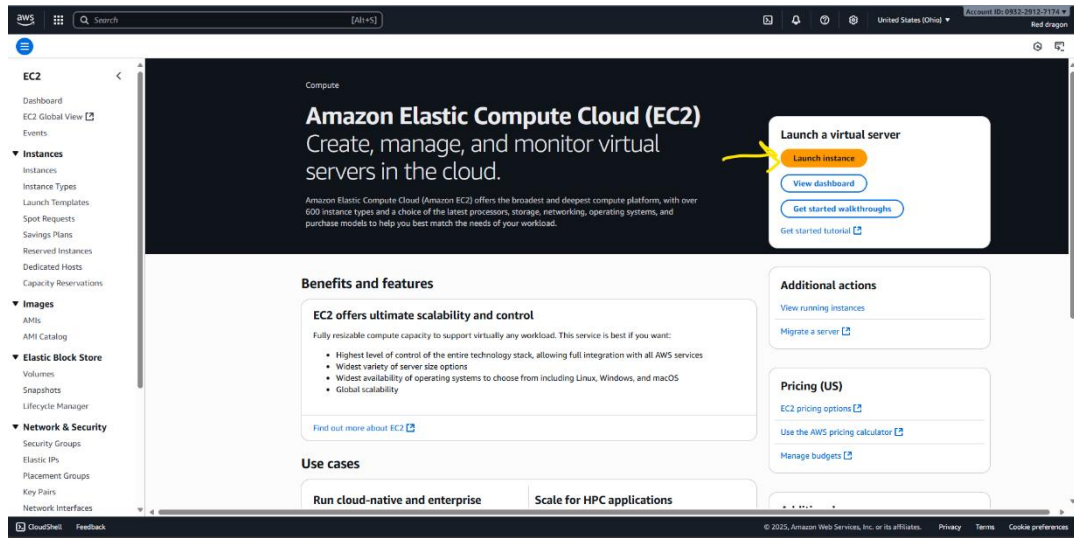


Getting Started using AWS Free Tier

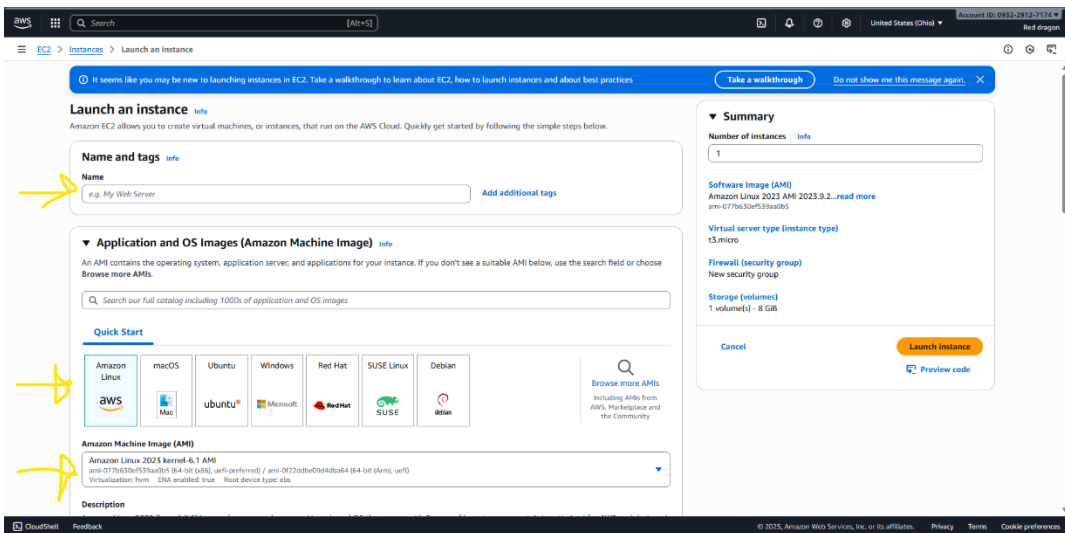
At this point, your AWS account has been created, and it is ready to go. Things may look a little different going forward between my pictures and your screen going forward. Let's dive into making our virtual machine.

1. On the AWS dashboard, you should see services on the left side in a widget. Click on EC2.

2. When the EC2 dashboard loads, you should see a yellow button called launch instance. Click on that.



3. Give your Virtual Machine a name, select your OS of choice, and pick your Amazon Machine Image of choice as well. I'm using Ubuntu and selecting Ubuntu Server 24.04 LTS.



4. Scroll down a little bit and you'll see the options below. Select your Instance Type and click on the button that says Create new key pair.

The screenshot shows the AWS Management Console 'Launch an instance' page. The 'Instance type' dropdown is set to 't2.micro'. The 'Key pair (login)' section shows a 'Select' dropdown and a 'Create new key pair' button. The 'Network settings' section shows 'vpc-06d4eb73c530db4c' and 'Subnet' set to 'No preference'. The 'Summary' panel on the right shows 'Number of instances: 1', 'Software image (AMI): Canonical, Ubuntu, 24.04, amd64', 'Virtual server type (instance type): t2.micro', 'Firewall (security group): New security group', and 'Storage (volumes): 1 volume(s) - 8 GiB'. Yellow arrows point to the 't2.micro' dropdown, the 'Create new key pair' button, and the 'Create security group' button in the network settings.

NOTE: Depending on the instance type you select. You can potentially burn through all your credits in a very short amount of time. My suggestion is that if you're running a Linux VM, keep the instance as small as possible for whatever you plan on running. It'll keep costs low, and your trial should last the entire 6 months. Select with caution.

5. Give your key pair a name, select your key pair type, and private key file format. Then click create key pair when finished.

The screenshot shows the 'Create key pair' dialog box. The 'Key pair name' field contains 'testkeys'. The 'Key pair type' section has 'RSA' selected. The 'Private key file format' section has '.pem' selected. A yellow box highlights the bottom section with a warning: 'When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. Learn more'. Yellow arrows point to the 'testkeys' field, the 'RSA' option, and the '.pem' option.

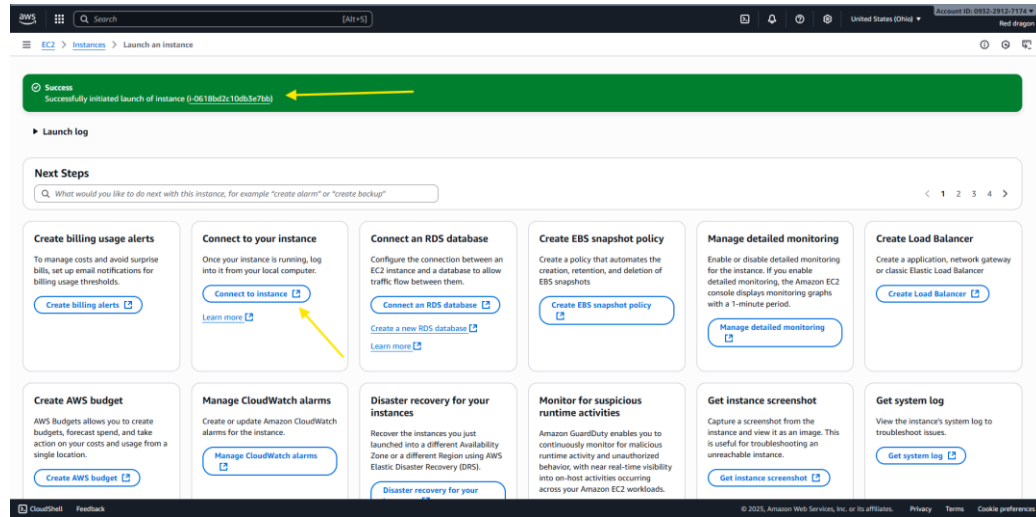
NOTE: When it comes to Key pair type, both will do the job in this case. RSA is more widely accepted, but ED25519 is more secure. For the sake of this tutorial, I'm using RSA because this VM will not be active for super long. When it comes to the private key file format, this comes down to how you will remote into the machine. I'm using the .pem format because I use terminal and SSH. The .ppk file is if you're going to use PuTTY to access it.

6. The file will be downloaded to your computer. Make note of where it downloaded to on your computer. You'll need this later.
7. On network settings, you will leave most of the options default except for the allow SSH traffic. Make sure you check the box to allow SSH traffic. On storage, set how much storage you want your virtual machine to have. After this, click launch instance, and it will spin up your VM.

The screenshot shows the AWS Management Console 'Launch an Instance' wizard. The 'Network settings' section is expanded, showing options for Network, Subnet, Auto-assign public IP, and Firewall (security group). The 'Firewall' section has 'Allow SSH traffic from' checked, with a dropdown menu set to 'Anywhere' (0.0.0.0/0). A red arrow points to the 'Allow SSH traffic from' checkbox, and a yellow arrow points to the 'Anywhere' dropdown. The 'Configure storage' section is also expanded, showing '1x' volume of '30' GiB with 'gp3' storage type. A red arrow points to the '30' GiB input field. The 'Summary' section on the right shows 'Number of instances: 1', 'Software image (AMI): Canonical, Ubuntu, 24.04, amd64...', 'Virtual server type (instance type): t2.micro', 'Firewall (security group): New security group', and 'Storage (volumes): 1 volume(s) - 30 GiB'. The 'Launch instance' button is highlighted in orange.

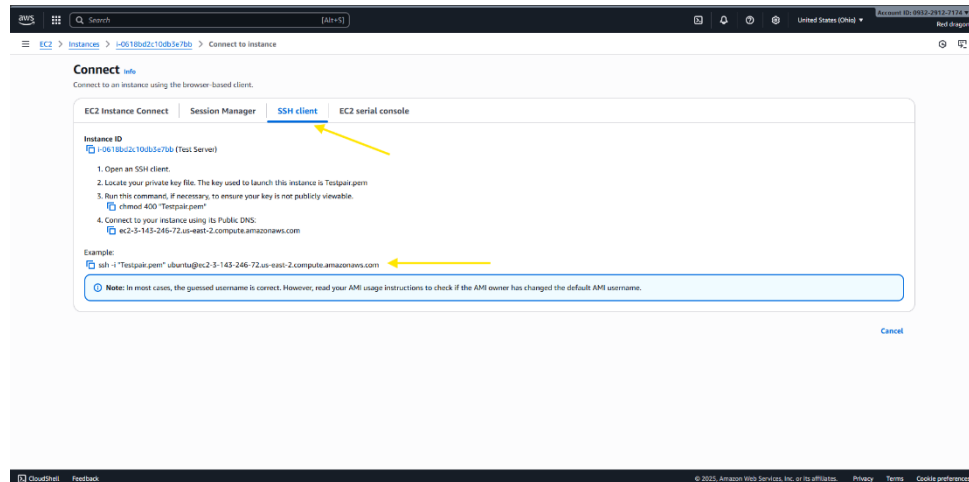
NOTE: When it comes to SSH allow options, there are three options. Anywhere, My IP, and Custom. I do not allow SSH from anywhere. I changed it to only allow from my public IP. Leaving SSH wide open is asking for trouble. As for the storage option, most Linux setups can get away with very little storage. If you're using Windows or Mac as a VM, I'd suggest allocating more storage.

8. If done correctly, you should see a page like below. You can click on either the name of your instance, and it'll take you to the dashboard where you can retrieve other important information, or you can click on Connect to instance, and it'll



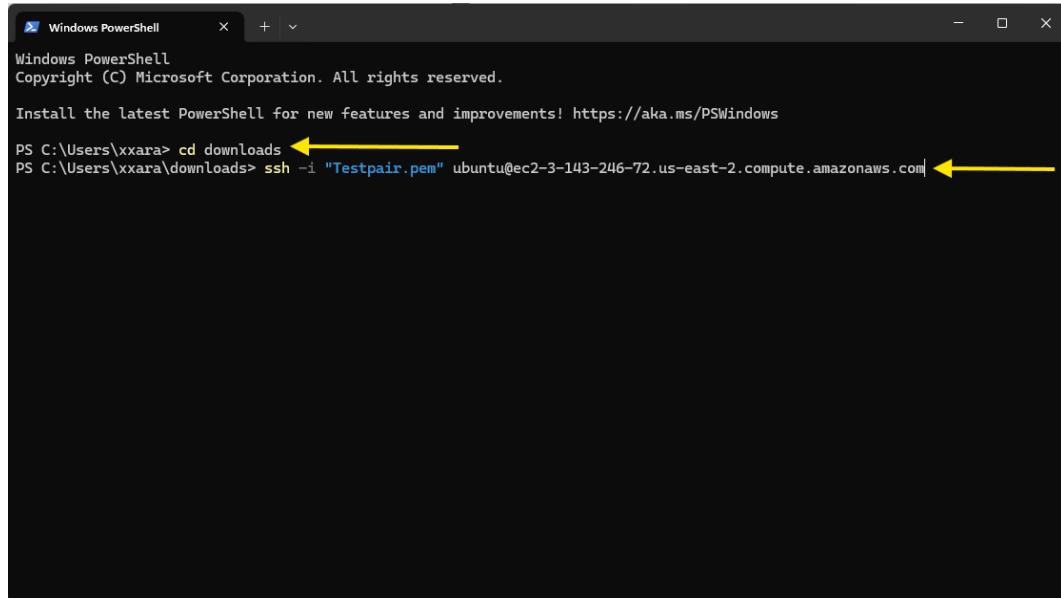
9. Click on your instance name, and it'll show you the dashboard. Most of the stuff here is informational. The biggest thing I use on the dashboard is the security tab. This is where you'll configure port rules for both inbound and outbound connections. You'll also see connect to instance as well. Click on that.

10. On this page, click SSH and make note of the example they give to connect. Copy that and open a terminal on the pc where you downloaded the SSH keys.



NOTE: If you set up a Windows VM, the instructions may show RDP instead of SSH, and the page may be a little different. The concept is the same.

11. Open a terminal and go to the directory where your SSH keys have been downloaded. From there, enter the example command from the Connect to instance instructions and hit enter. It will ask you if you want to continue connecting. Type yes and hit enter. It should connect to your VM.



```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\xxara> cd downloads
PS C:\Users\xxara\downloads> ssh -i "Testpair.pem" ubuntu@ec2-3-143-246-72.us-east-2.compute.amazonaws.com
```

NOTE: *This instruction is only if you're using SSH to connect to the terminal. If you're using Putty, the instructions will vary a little bit. If you set up a Windows VM, use the RDP instructions on the connect to instance page.*

At this point, you are ready to go. There are a few notes I want to mention:

1. Shutdown your instance whenever you're not using it. It'll keep you from incurring unnecessary costs and burning credits.
2. If you set up a Linux VM and need to open a port to access a service that you installed. On the left side of the page, under network and security, click on security groups. Click on one of the security groups and click on inbound rules. Click on edit inbound rules and click on add rule. They do have templates, but you can manually set your own port that you need open. Set the source to "My IP". It'll be a security risk otherwise.
3. Do not lose your key pair file. You will not be able to connect to your instance without it.
4. If you decide to keep AWS long term, make sure you switch from the free tier to the paid tier. Most small Linux VMs usually do not incur high charges.