

Setting up an account:

1. Go to <https://aws.amazon.com/account/> and select create an AWS account.

The screenshot shows the AWS Account management interface. At the top, there's a navigation bar with links for Contact Us, Support, English, My Account, Sign In, and a prominent orange 'Create an AWS Account' button. Below the navigation bar, there are several sections: 'Billing & Cost Management Console', 'AWS Identity and Access Management', 'Consolidated Billing', 'DevPay Activity', 'Personal Information', 'Payment Method', 'Security Credentials', and 'Usage Reports'. Each section contains a brief description and a link to its respective details page.

Account

Billing & Cost Management Console

View current charges and account activity, itemized by service. Previous months' billing statements are also available.

AWS Identity and Access Management

Create multiple Users and manage the permissions for each of these Users within your AWS Account.

Consolidated Billing

Receive one bill for multiple AWS Accounts, with cost breakdowns for each account. Usage is combined, enabling you to more quickly reach lower-priced volume tiers.

DevPay Activity

View revenue and costs for your Amazon DevPay products. Manage your Amazon DevPay products.

Manage Your Account

View the services you are signed up for, add new services or cancel your services.

Payment Method

View and edit current payment method, as well as add new payment methods.

Personal Information

View and edit personal contact information, such as address and phone number. Set communication preferences for email subscriptions.

Security Credentials

Amazon Web Services uses access identifiers to authenticate requests to AWS and to identify the sender of a request. Three types of identifiers are available: (1) AWS Access Key Identifiers, (2) X.509 Certificates, and (3) Key pairs.

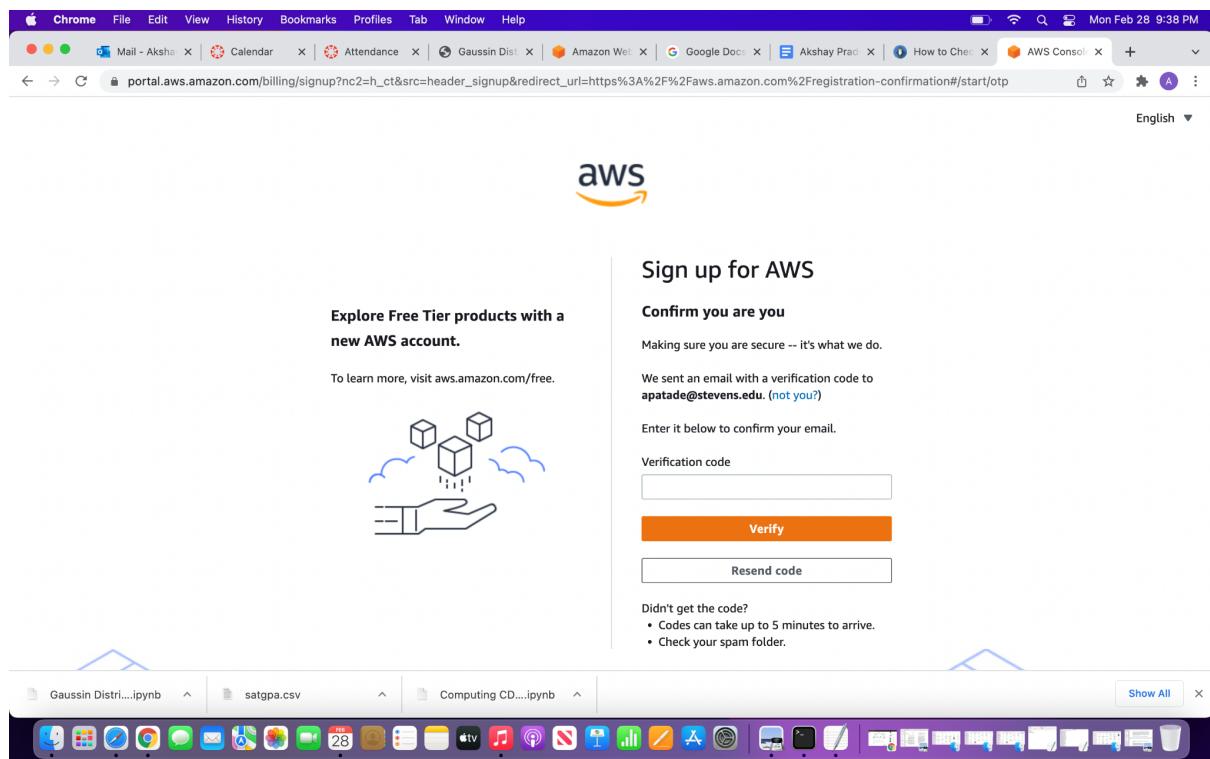
Usage Reports

Download usage reports for each service you are subscribed to. Reports can be customized by specifying usage types, timeframe, service operations, and more.

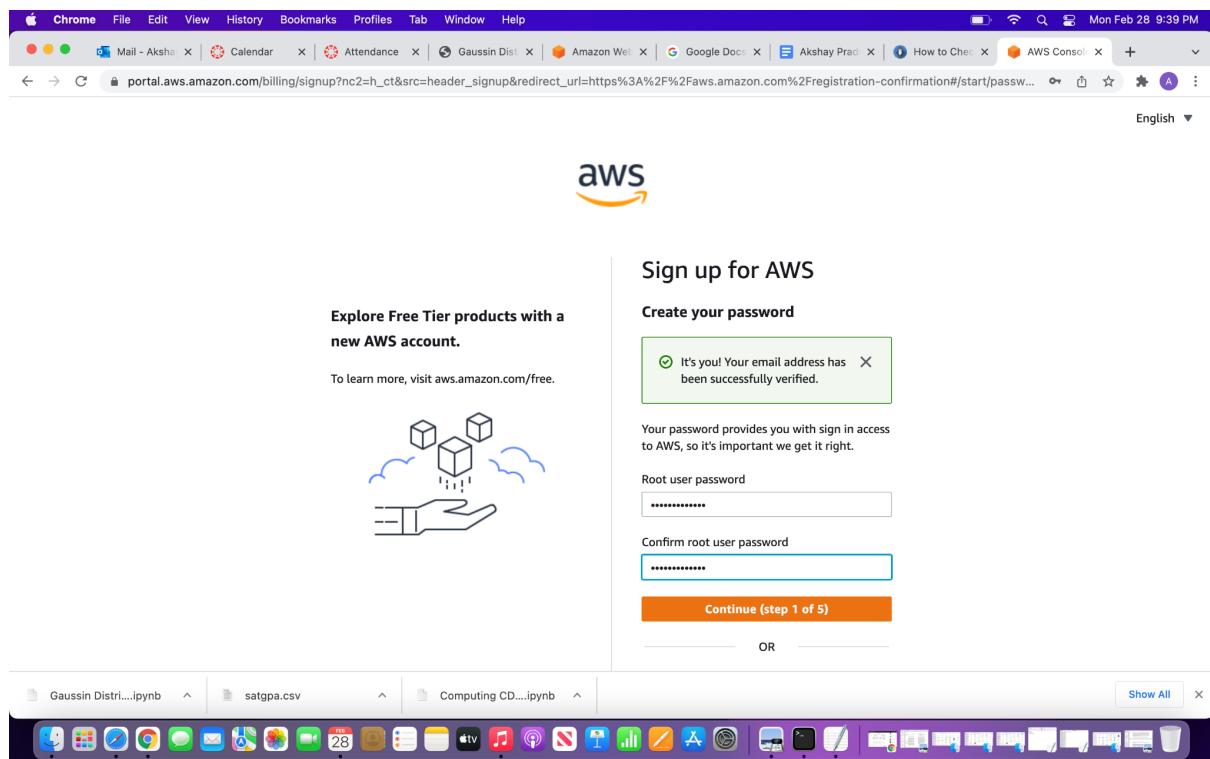


2. Enter your email id and set the username. Once you have entered the details it will ask for the verification of the email id. Enter the code.

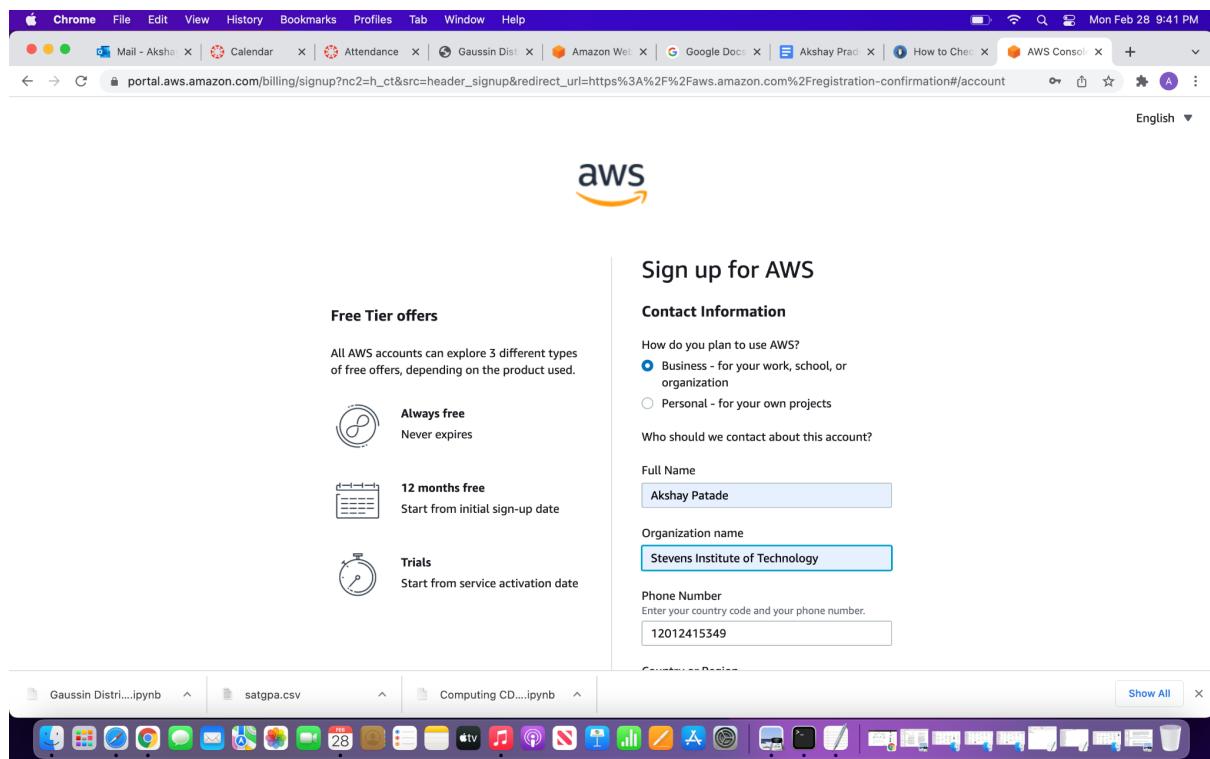
The screenshot shows the 'Sign up for AWS' page. At the top, there's a logo and a heading 'Sign up for AWS'. Below the heading, there's a section titled 'Explore Free Tier products with a new AWS account.' with a sub-instruction 'To learn more, visit aws.amazon.com/free'. To the right of this text is an illustration of a hand holding three small cubes. Further down the page, there are fields for 'Root user email address' and 'AWS account name', both with placeholder text. Below these fields is a large orange 'Verify email address' button. To the right of the button is a horizontal line with the word 'OR' in the center. Below the 'OR' line is a button labeled 'Sign in to an existing AWS account'. The page is framed by a decorative border featuring stylized building icons.



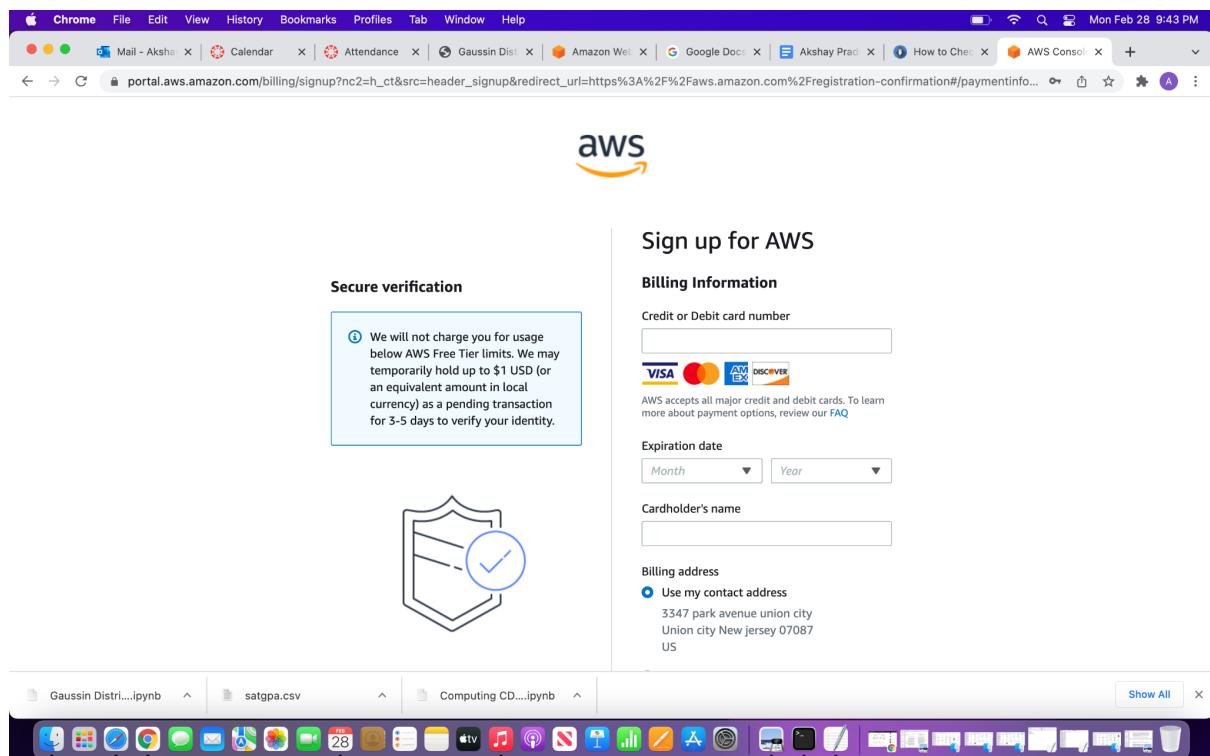
3. Once the code is verified it will ask for creating a password. Click on continue.



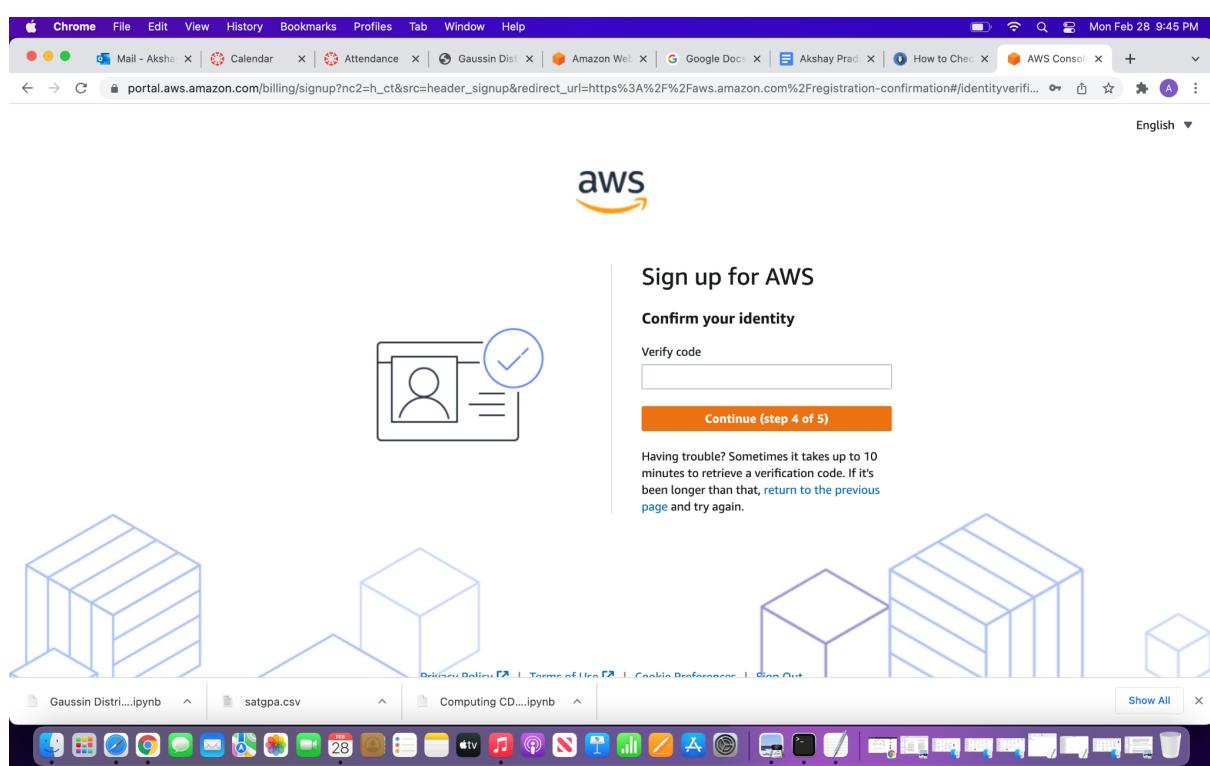
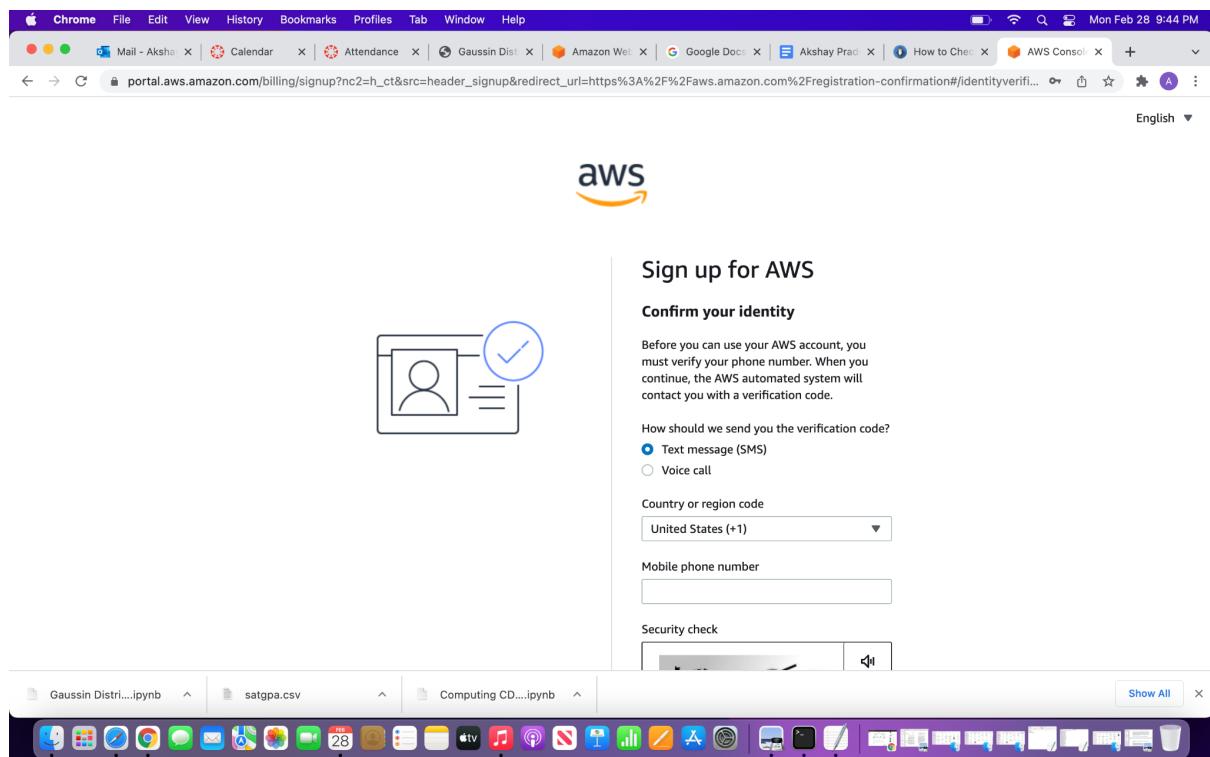
4. After that it will ask for personal information. Fill in the personal information and click continue.



5. Enter the bank details and click on continue.



6. After that it will ask you to verify your identity. Verify SMS.



7. Finally it will ask for support plan. Select your plan and click complete.

Screenshot of a Mac desktop showing a Chrome browser window. The title bar says "Sign up for AWS". The main content area shows three support plan options: "Basic support - Free", "Developer support - From \$29/month", and "Business support - From \$100/month". Below this, there's a section for "Enterprise level support" with a building icon and a link to learn more. At the bottom, there's a large orange "Complete sign up" button.

8. Once it is completed, it will show the completion page.

Screenshot of a Mac desktop showing a Chrome browser window. The title bar says "aws.amazon.com/registration-confirmation/". The main content area features a rocket launching from a cloud icon, followed by the text "Congratulations! Thank you for signing up with AWS." It also includes a message about account activation and a "Go to the AWS Management Console" button. At the bottom, there's a "Sign up for another account or Contact Sales" link.

Amazon Simple Queue Service

i. Login into AWS and search for Amazon Simple Queue Service

The screenshot shows the AWS Management Console search results for the term 'queue'. The search bar at the top contains 'queue'. The results are categorized under 'Services' (2), 'Features (2)', and 'Blogs'.

- Services (2):**
 - Simple Queue Service (SQS Managed Message Queues)
 - Amazon MQ (Managed message broker service for Apache ActiveMQ and RabbitMQ)
- Features (2):**
 - Job queues (Batch feature)
 - Quantum tasks (Amazon Braket feature)
- Blogs:**
 - Introducing Amazon Simple Queue Service dead-letter queue redrive to source queues (By: Julian Wood | Date: December 2, 2021)
 - Queue Integration with Third-party Services on AWS (By: Rostislav Markov, Justin Kuskowski, Ravindra Agrawal, Saswata Dash, Michael Stoyanov | Date: December 27, 2021)

On the right side of the search results, there is a sidebar with the title 'Console Home' and a link to 'AWS Mobile App now available in our additional regions. Learn more'.

ii. Select Create queue.

The screenshot shows the Amazon SQS home page. The main heading is 'Amazon SQS' and 'A message queuing service'. Below it, a section titled 'How it works' contains a diagram illustrating the process: Producers send messages to an 'Amazon SQS' queue, which then stores messages for Consumers to poll. The 'Get started' section includes a 'Create queue' button. The 'Pricing (US)' section notes that you can get started with Amazon SQS for free. The 'Documentation' section links to 'Developer guide' and 'API reference'.

iii. Setting the properties of the queue.

The screenshot shows the 'Create queue' page in the AWS SQS console. The 'Details' tab is selected, displaying options for 'Type'. A note says 'You can't change the queue type after you create a queue.' The 'Standard' type is selected, showing 'At-least-once delivery, message ordering isn't preserved' with options for 'At-least once delivery' and 'Best-effort ordering'. The 'FIFO' type is also shown with 'First-in-first-out delivery, message ordering is preserved' and options for 'First-in-first-out delivery' and 'Exactly-once processing'. The 'Name' field is set to 'Akshay'. Below the name, a note says 'A queue name is case-sensitive and can have up to 80 characters. You can use alphanumeric characters, hyphens (-), and underscores (_).'

The screenshot shows the 'Create queue' page in the AWS SQS console. The 'Configuration' tab is selected, displaying settings for 'Visibility timeout' (30 Seconds) and 'Message retention period' (4 Days). Below these, there are sections for 'Delivery delay' (0 Seconds), 'Maximum message size' (256 KB), and 'Receive message wait time' (0 Seconds). The 'Access policy' section is also visible, with 'Basic' access method selected. The JSON for the access policy is shown as:

```
{  
  "Version": "2008-10-17",  
  ...  
}
```

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console.aws.amazon.com/sqs/v2/home?region=us-east-1#create-queue#/

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Access policy

Define who can access your queue. [Info](#)

Choose method

Basic Use simple criteria to define a basic access policy.

Advanced Use a JSON object to define an advanced access policy.

Define who can send messages to the queue

Only the queue owner Only the owner of the queue can send messages to the queue.

Only the specified AWS accounts, IAM users and roles Only the specified AWS account IDs, IAM users and roles can send messages to the queue.

Define who can receive messages from the queue

Only the queue owner Only the owner of the queue can receive messages from the queue.

Only the specified AWS accounts, IAM users and roles Only the specified AWS account IDs, IAM users and roles can receive messages from the queue.

JSON (read-only)

```
Version: "2008-10-17",
"Id": "__default_policy_ID",
"Statement": [
  {
    "Sid": "__owner_statement",
    "Effect": "Allow",
    "Principal": {
      "AWS": "48442202277"
    },
    "Action": [
      "SQS:*"
    ],
    "Resource": "arn:aws:sqs:us-east-1:48442202277:Akshay"
  }
]
```

▼ Redrive allow policy - Optional

Identify which source queues can use this queue as the dead-letter queue. [Info](#)

Select which source queues can use this queue as the dead-letter queue.

Disabled

Enabled

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console.aws.amazon.com/sqs/v2/home?region=us-east-1#/create-queue#

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☰

▼ Redrive allow policy - *Optional*
Identify which source queues can use this queue as the dead-letter queue. [Info](#)

Select which source queues can use this queue as the dead-letter queue.

Disabled
 Enabled

▼ Encryption - *Optional*
Amazon SQS provides in-transit encryption by default. To add at-rest encryption to your queue, enable server-side encryption. [Info](#)

Server-side encryption

Disabled
 Enabled

▼ Dead-letter queue - *Optional*
Send undeliverable messages to a dead-letter queue. [Info](#)

Set this queue to receive undeliverable messages.

Disabled
 Enabled

▼ Tags - *Optional*
A tag is a label assigned to an AWS resource. Use tags to search and filter your resources or track your AWS costs. [Learn more](#)

Key	Value - optional

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Server-side encryption

Dead-letter queue - Optional

Tags - Optional

Create queue

Queue Akshay created successfully

Akshay

Details Info

Name: Akshay

Type: Standard

ARN: arn:aws:sqs:us-east-1:484442202277:Akshay

Encryption: Disabled

URL: https://sqs.us-east-1.amazonaws.com/484442202277/Akshay

Dead-letter queue: -

SNS subscriptions | Lambda triggers | Dead-letter queue | Monitoring | Tagging | Access policy | Encryption | Dead-letter queue redrive tasks

Subscription region: us-east-1

iv. Sending a message in the queue.

The screenshot shows the AWS SQS 'Send and receive messages' interface. In the 'Send message' section, a green success message box displays: 'Your message has been sent and is ready to be received.' Below it, the 'Message body' field contains the text: 'Scored a gold medal in volleyball during high school'. Under 'Delivery delay', a dropdown menu is set to 'Seconds' with a value of '0'. In the 'Message attributes - Optional' section, there is one attribute named 'Medal' with type 'String' and value 'Gold'. At the bottom, the 'Receive messages' section shows 'Messages available' as 1, with a table row for the received message.

ID	Sent	Size	Receive count
607f0071-855c-4ab4-8a4f-5f07bbeaa64	2/23/2022, 15:46:34 EST	67 bytes	2

v. Viewing the message in the queue.

The screenshot shows the AWS SQS 'Receive messages' interface. It displays a single message in the 'Messages (1)' list. The message ID is '607f0071-855c-4ab4-8a4f-5f07bbeaa64', it was sent on '2/23/2022, 15:46:34 EST', and its size is '67 bytes'. The 'Receive count' is '2'. The 'Polling progress' status is '0 receives/second'.

The screenshot shows the AWS SQS console with a message detail view. The message ID is 607f0071-855c-4ab4-8a4f-5f07bbebaa64. The message body is "Scored a gold medal in volleyball during high school". The message was sent on 2/23/2022, 15:46:34 EST, first received at 2/23/2022, 15:47:43 EST, and has a receive count of 2. It has 1 message attribute with a size of 15 bytes. The message attributes include an MD5 of d2ebe5bd8d187a34043be and a key d273cccd5e8. The message was sent by account ID 484442202277.

ID	Size	MD5 of message body	Sender account ID
607f0071-855c-4ab4-8a4f-5f07bbebaa64	67 bytes	cd3d8c5c3e0c0cea3b4d6 7f08240e71c	484442202277

Sent	First received	Receive count	Message attributes count
2/23/2022, 15:46:34 EST	2/23/2022, 15:47:43 EST	2	1

Message attributes size	MD5 of message attributes
15 bytes	d2ebe5bd8d187a34043be d273cccd5e8

Details Body Attributes

Delivery delay Info
0 Second
Should be between 0 seconds and 15 s

Message attributes - Optional

Medal

Add new attribute

Receive messages Info
Messages available 1

Messages (1)

Search messages

Done

Sort by: ID Sent Size Receive count

The screenshot shows the AWS SQS console interface. A message detail dialog is open, displaying the message ID: 607f0071-855c-4ab4-8a4f-5f07bbebaa64. The 'Attributes' tab is selected, showing a single attribute named 'Medal' with the value 'Gold'. The main pane shows a list of messages with one message available: 607f0071-855c-4ab4-8a4f-5f07bbebaa64, sent on 2/23/2022, 15:46:34 EST, with a size of 67 bytes and a receive count of 2.

vi. Deleting a message in the queue.

The screenshot shows the AWS SQS console interface. A delete confirmation dialog is open, asking if you're sure you want to delete the message with ID 607f0071-855c-4ab4-8a4f-5f07bbebaa64 (67 bytes). The 'Delete' button is highlighted. The main pane shows the message list, which now has a receive count of 5 after the deletion.

The screenshot shows the AWS SQS console with a single queue named 'Akshay'. The queue details page includes sections for 'Delivery delay' (set to 0 seconds), 'Message attributes - Optional' (with fields for 'Enter name', 'String', 'Custom type', and 'Enter value'), and 'Receive messages' (info). A message deletion confirmation box states '1 message deleted successfully.' Below this, the 'Messages' section shows a table with columns: ID, Sent, Size, and Receive count. The table is currently empty, displaying the message 'No messages. To view messages in the queue, poll for messages.' Buttons for 'Edit poll settings', 'Stop polling', and 'Poll for messages' are also present.

vii. Deleting the queue.

The screenshot shows the AWS SQS console with the 'Queues' list page. It displays one queue named 'Akshay' (Standard type, created on 2/23/2022, 15:39:12 EST). The queue has 0 messages available and 0 messages in flight. Encryption is disabled. The 'Actions' dropdown menu is open, showing options like 'Edit', 'Delete', 'Send and receive messages', and 'Create queue'.

The screenshot shows the AWS SQS console with a single queue named 'Akshay'. A modal dialog box titled 'Delete queue' is open, asking if the user wants to permanently delete the queue. It states: 'Are you sure you want to delete the following queue permanently? You can't undo this action.' Below this, it lists 'Akshay - contains 0 messages'. To confirm, the user is asked to enter the phrase 'delete' into a text input field. The dialog has 'Cancel' and 'Delete' buttons at the bottom.

The screenshot shows the AWS SQS console after the queue 'Akshay' has been deleted. A green success message banner at the top states: 'Queue Akshay has been deleted successfully.' The main table below shows 'Queues (0)' and a message stating 'No queues' and 'No queues available.' A 'Create queue' button is visible at the bottom of the table.

2. Amazon EC2 Service.

- Search for EC2 in Amazon Management Console and select EC2.

The screenshot shows the AWS Management Console search results for 'ec2'. The search bar at the top contains 'ec2'. On the left, there's a sidebar with categories like Services (9), Features (40), Blogs, Documentation, Knowledge Articles, Tutorials, Events, and Marketplace. The main content area displays 'Search results for 'ec2'' under 'Services'. It lists several services: EC2 (Virtual Servers in the Cloud), EC2 Image Builder (A managed service to automate build, customize and deploy OS images), AWS Compute Optimizer (Recommend optimal AWS Compute resources for your workloads), and AWS Firewall Manager (Central management of firewall rules). Below these, under 'Features', are 'Export snapshots to EC2' (a Lightsail feature) and 'Dashboard' (an EC2 feature). To the right, there's a sidebar with 'AWS Home' information and a 'Deploy Machine' section.

ii. Go to the launch instances orange button and select launch instances.

The screenshot shows the EC2 Management console Instances page. The URL is 'console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:'. The left sidebar has sections for New EC2 Experience, EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances (with sub-options like Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations), Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes, Snapshots). The main content area has tabs for Instances and Info. Under Actions, there's a dropdown menu with options: Launch instances (highlighted in orange), Launch instance from template, and Migrate a server. A message says 'You do not have any instances in this region'. Below it, a 'Select an instance' section is shown.

iii. Select Amazon Linux 2 AMI (HVM).

iv. Select t2.micro instance and select Next: Configure Instance Details button present on the bottom right.

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro <small>Free tier eligible</small>	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t2	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t3	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t3	t3.micro	2	1	EBS only	Yes	Up to 5 Gigabit	Yes
<input type="checkbox"/>	t3	t3.small	2	2	EBS only	Yes	Up to 5 Gigabit	Yes

v. Configure the instance and after that click on add storage button.

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of Instances	<input type="text" value="1"/>	Launch into Auto Scaling Group
Purchasing option	<input type="checkbox"/> Request Spot instances	
Network	vpc-004e953697272f0f9 (default) <input type="button" value="Create new VPC"/>	
Subnet	No preference (default subnet in any Availability Zone) <input type="button" value="Create new subnet"/>	
Auto-assign Public IP	Use subnet setting (Enable) <input type="button" value=""/>	
Hostname type	Use subnet setting (IP name) <input type="button" value=""/>	
DNS Hostname	<input type="checkbox"/> Enable IP name IPv4 (A record) DNS requests <input checked="" type="checkbox"/> Enable resource-based IPv4 (A record) DNS requests <input type="checkbox"/> Enable resource-based IPv6 (AAAA record) DNS requests	
Placement group	<input type="checkbox"/> Add instance to placement group	
Capacity Reservation	Open <input type="button" value=""/>	
Domain join directory	No directory <input type="button" value="Create new directory"/>	
IAM role	None <input type="button" value="Create new IAM role"/>	
Shutdown behavior	Stop <input type="button" value=""/>	

Review and Launch

Step 3: Configure Instance Details

Stop - Hibernate behavior Enable hibernation as an additional stop behavior

Enable termination protection Protect against accidental termination

Monitoring Enable CloudWatch detailed monitoring
Additional charges apply.

Tenancy Additional charges will apply for dedicated tenancy.

Elastic Inference Add an Elastic Inference accelerator
Additional charges apply.

Credit specification Unlimited
Additional charges may apply

File systems

Advanced Details

Enclave	<input type="checkbox"/> Enable
Metadata accessible	Enabled <input type="button" value=""/>
Metadata version	V1 and V2 (token optional) <input type="button" value=""/>
Metadata token response hop limit	1 <input type="button" value=""/>
Allow tags in metadata	Disabled <input type="button" value=""/>
User data	<input checked="" type="radio"/> As text <input type="radio"/> As file <input type="checkbox"/> Input is already base64 encoded <small>(Optional)</small>

Review and Launch

vi. Add the Storage to your instance and click on add tags button.

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-0e8a7a7609c630051	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/> Not Encrypt

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

▼ Shared file systems

You currently don't have any file systems on this instance. Select "Add file system" button below to add a file system.

Add file system

Cancel Previous Review and Launch Next: Add Tags

vii. Add tags to your instance and then select configure security group.

Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. A copy of a tag can be applied to volumes, instances or both. Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key	(128 characters maximum)	Value	(256 characters maximum)	Instances	Volumes	Network Interfaces
ec2-instance		first-ec2-instance		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

Cancel Previous Review and Launch Next: Configure Security Group

vii. Configure the security group and at the end click on the review and launch button.

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: Create a new security group
 Select an existing security group

Security group name: first-security-group
Description: first security group for ec2 instance

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Add Rule

Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Previous Review and Launch

viii. Create a key, download it and select the launch instances button.

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance. Amazon EC2 supports ED25519 and RSA key pair types.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Create a new key pair
 RSA ED25519
Key pair name
first-ec2-instance

Download Key Pair

You have to download the **private key file** (*.pem file) before you can continue. Store it in a secure and accessible location. You will not be able to download the file again after it's created.

Cancel Launch Instances

ix. Your instance will be displayed in the running state.

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with various navigation options like EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, and Images. The main content area shows a table with one instance listed:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publ
-	i-0ce753e5f56d2d196	Running	t2.micro	-	No alarms	us-east-1d	ec2-1

Below the table, there's a detailed view for the selected instance (i-0ce753e5f56d2d196). It shows the following details:

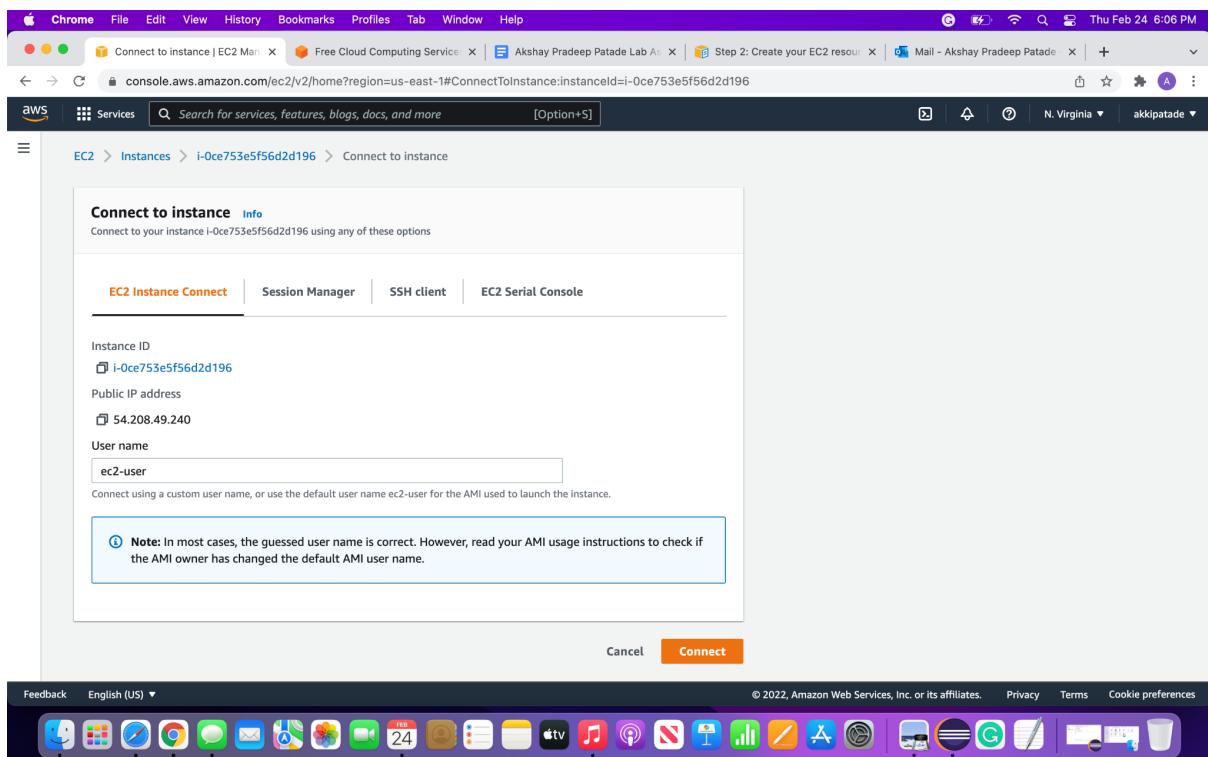
Details	Security	Networking	Storage	Status checks	Monitoring	Tags
Instance summary						
Instance ID i-0ce753e5f56d2d196	Public IPv4 address 54.208.49.240 open address	Private IPv4 addresses 172.31.90.137				
IPv6 address -	Instance state Pending	Public IPv4 DNS ec2-54-208-49-240.compute-1.amazonaws.com open address				
Hostname type	Private IP DNS name (IPv4 only)	Answer private resource DNS name				

x. To connect to the instance. Right-click on the instance and then select connect.

This screenshot is similar to the previous one, showing the AWS EC2 Instances page with a single instance running. However, a context menu is open over the instance row for 'i-0ce753e5f56d2d196'. The menu options include:

- Launch instances
- Launch instance from template
- Migrate a server
- Connect** (highlighted in blue)
- Stop instance
- Start instance
- Reboot instance
- Hibernate instance
- Terminate instance

The rest of the interface and instance details are identical to the first screenshot.



xi. Execute the commands uname -a, whoami, df -h, ifconfig -a, netstat

uname -a: Returns the information about the operating system, system hardware and the version of the kernel. This command provides the following information.

Linux: Kernel Name

Ip-172-31-90-137.ec2.internal: Network node hostname

5.10.96-90.460.amzn2.x86_64: Kernel Release.

#1 SMP Fri Feb 4 17:12:04 UTC 2022: Kernel Version

X86_64: Machine hardware name

X86_64:Processor type

X86_64: Hardware platform

GNU/Linux: Operating System

whoami: Print the username associated with the effective current user id.

whoami can take two parameters:

whoami –help & whoami –version.

whoami —help: Displays the help message and exit

whoami –version: Displays the version information and exit.

df-h :

This command is typically used to showcase the information of disks such as name, total blocks, total disk space, available disk space, and the mounting points of a file system.

There are various commands associated with df.

df -h command will show the statistics of the disk in the human-readable format i.e it gives the information of the disk in bytes, megabytes, and gigabytes.

df -a command: It is similar to df command. The only difference is that it provides additional information on the dummy file system along with the file system disk usage and memory utilization.

df -k: displays the disk size in kilobytes.

df -m: displays the disk size in megabytes.

df -i : displays the number of used nodes and their percentages for the file system.

Ifconfig -a: It is used to configure and view the status of the network interfaces in the system. The above command displays all the network interfaces, even the interfaces which are down.

ifconfig also have various commands

ifconfig - s: Displays short information about the network.

ifconfig interface up: This command is used to activate the driver for the interface.

ifconfig interface down: This command is used to deactivate the driver for the interface.

ifconfig interface -arp: This command is used to enable or disable the use of arp protocol for a particular interface.

Netstat: This command is used to show open ports on the host device and their corresponding addresses, the routing table, and masquerade connections.

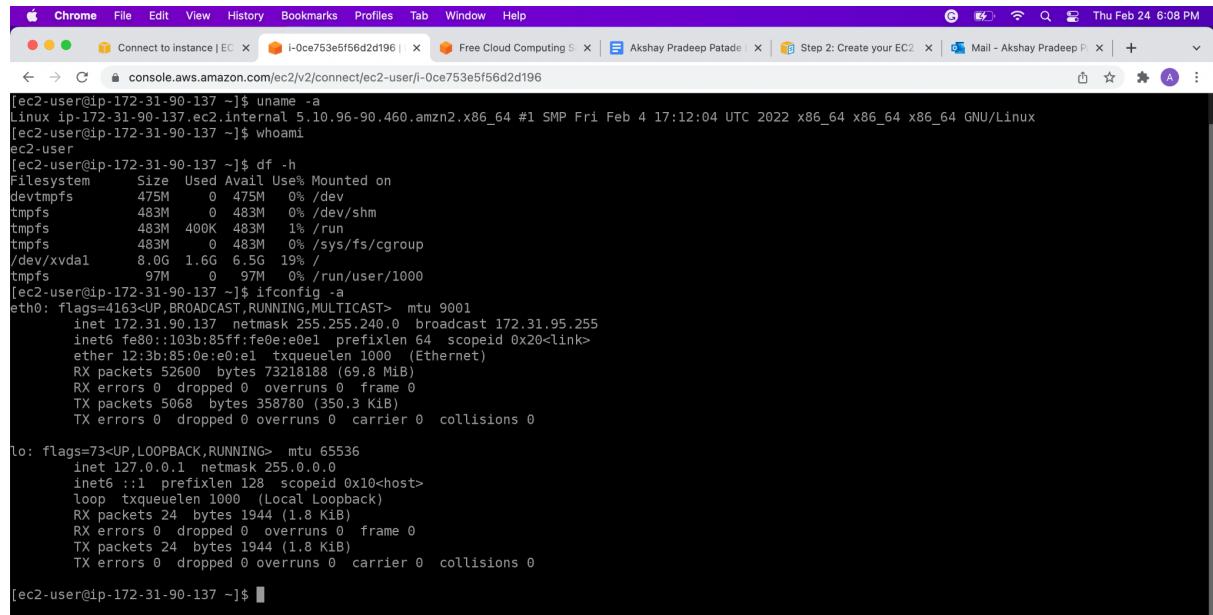
Show both listening and non-listening sockets. With the –interfaces option, show interfaces that are not up.

Netstat have other commands.

netstat - b: This command shows the number of network bytes in and out.

netstat -d: This command displays the number of dropped packets.

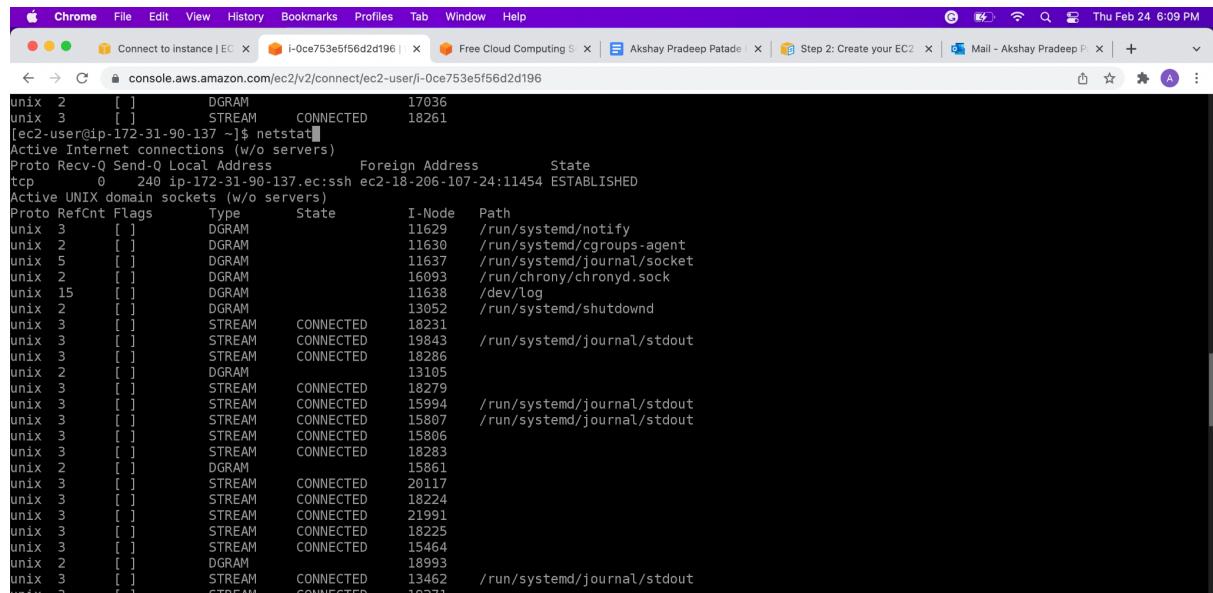
netstat -l: Prints the full ipv6 address.



```
[ec2-user@ip-172-31-90-137 ~]$ uname -a
Linux ip-172-31-90-137.ec2.internal 5.10.96-90.460.amzn2.x86_64 #1 SMP Fri Feb 4 17:12:04 UTC 2022 x86_64 x86_64 x86_64 GNU/Linux
[ec2-user@ip-172-31-90-137 ~]$ whoami
ec2-user
[ec2-user@ip-172-31-90-137 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
/devtmpfs        475M   0B  475M   0% /dev
tmpfs           483M   0B  483M   0% /dev/shm
tmpfs           483M  400K 483M   1% /run
tmpfs           483M   0B  483M   0% /sys/fs/cgroup
/dev/xvda1       8.0G  1.6G  6.5G  19% /
tmpfs           97M   0B  97M   0% /run/user/1000
[ec2-user@ip-172-31-90-137 ~]$ ifconfig -a
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 9001
        inet 172.31.90.137  brd 172.31.95.255  broadcast 172.31.95.255
          inet6 fe80::103b:85ff:fe0e:e0el  brd fe80::ff:fe0e:e0el  scopeid 0x20<link>
            ether 12:3b:85:0e:e0:el  txqueuelen 1000  (Ethernet)
              RX packets 52600  bytes 73218188 (69.8 MiB)
              RX errors 0  dropped 0  overruns 0  frame 0
              TX packets 5068  bytes 358780 (350.3 KiB)
              TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
          inet6 ::1  prefixlen 128  scopeid 0x10<host>
            loop  txqueuelen 1000  (Local Loopback)
              RX packets 24  bytes 1944 (1.8 KiB)
              RX errors 0  dropped 0  overruns 0  frame 0
              TX packets 24  bytes 1944 (1.8 KiB)
              TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0
[ec2-user@ip-172-31-90-137 ~]$
```

i-0ce753e5f56d2d196

Public IPs: 54.208.49.240 Private IPs: 172.31.90.137



```
unix  2      [ ]          DGRAM          17036
unix  3      [ ]          STREAM         CONNECTED     18261
[ec2-user@ip-172-31-90-137 ~]$ netstat -l
Active Internet connections (w/o servers)
Proto Recv-Q Local Address          Foreign Address      State
tcp     0      240  ip-172-31-90-137.ec2:ssh  ec2-18-206-107-24:11454 ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State          I-Node Path
unix  3      [ ]          DGRAM          CONNECTED    11629  /run/systemd/notify
unix  2      [ ]          DGRAM          CONNECTED    11630  /run/systemd/cgroups-agent
unix  5      [ ]          DGRAM          CONNECTED    11637  /run/systemd/journal/socket
unix  2      [ ]          DGRAM          CONNECTED    16093  /run/chrony/chronyd.sock
unix  15     [ ]          DGRAM          CONNECTED    11638  /dev/log
unix  2      [ ]          DGRAM          CONNECTED    13052  /run/systemd/shutdownd
unix  3      [ ]          STREAM         CONNECTED    18231
unix  3      [ ]          STREAM         CONNECTED    19843  /run/systemd/journal/stdout
unix  3      [ ]          STREAM         CONNECTED    18286
unix  2      [ ]          DGRAM          CONNECTED    13105
unix  3      [ ]          STREAM         CONNECTED    18279
unix  3      [ ]          STREAM         CONNECTED    15994  /run/systemd/journal/stdout
unix  3      [ ]          STREAM         CONNECTED    15807  /run/systemd/journal/stdout
unix  3      [ ]          STREAM         CONNECTED    15806
unix  3      [ ]          STREAM         CONNECTED    18283
unix  2      [ ]          DGRAM          CONNECTED    15861
unix  3      [ ]          STREAM         CONNECTED    20117
unix  3      [ ]          STREAM         CONNECTED    18224
unix  3      [ ]          STREAM         CONNECTED    21991
unix  3      [ ]          STREAM         CONNECTED    18225
unix  3      [ ]          STREAM         CONNECTED    15464
unix  2      [ ]          DGRAM          CONNECTED    18993
unix  3      [ ]          STREAM         CONNECTED    13462  /run/systemd/journal/stdout
unix  3      [ ]          STREAM         CONNECTED    19271
unix  3      [ ]          STREAM         CONNECTED    18276
```

i-0ce753e5f56d2d196

Public IPs: 54.208.49.240 Private IPs: 172.31.90.137



xii. To stop the instance, right-click on the instance and select stop instance.

The screenshot shows the AWS EC2 Instances page. A modal window at the top center says "Successfully stopped i-0ce753e5f56d2d196". Below it, the main table lists one instance: "i-0ce753e5f56d2d196" which is "Stopped". The "Actions" dropdown menu for this instance has "Stop instance" selected. The left sidebar shows navigation options like EC2 Dashboard, Instances, and Images.

xiii. To terminate the instance, right-click on the instance and select terminate.

The screenshot shows the AWS EC2 Instances page. A modal window for instance "i-0ce753e5f56d2d196" is open, with the "Actions" dropdown menu expanded. The "Terminate instance" option is highlighted. The left sidebar shows navigation options like EC2 Dashboard, Instances, and Images.

Screenshot of the AWS EC2 Instances page showing a single instance (i-0ce753e5f56d2d196) in the 'running' state. A modal dialog titled 'Terminate instance?' is open, warning that terminating an EBS-backed instance will delete the root EBS volume. The user is prompted to confirm the termination. The instance details show it is an 't2.micro' type with a public IPv4 address of 172.31.30.137.

Screenshot of the AWS EC2 Instances page showing the same instance (i-0ce753e5f56d2d196) now in the 'terminated' state. A green success message at the top indicates the instance was successfully terminated. The instance details now show 'Terminated' under the 'Instance state' column.