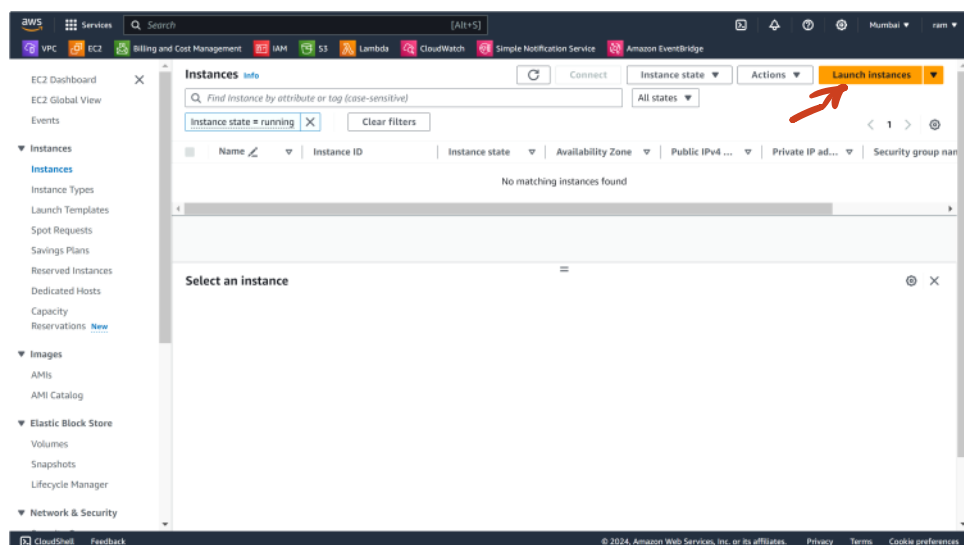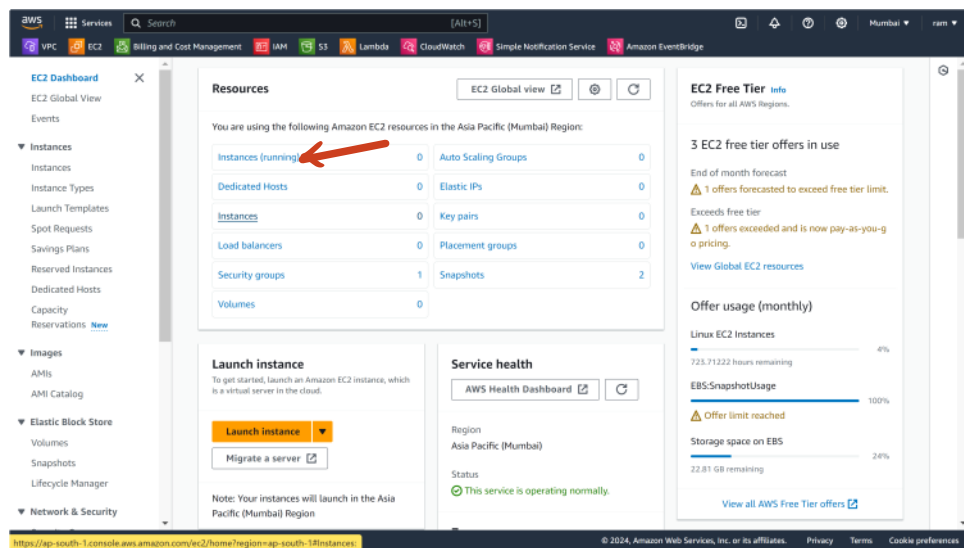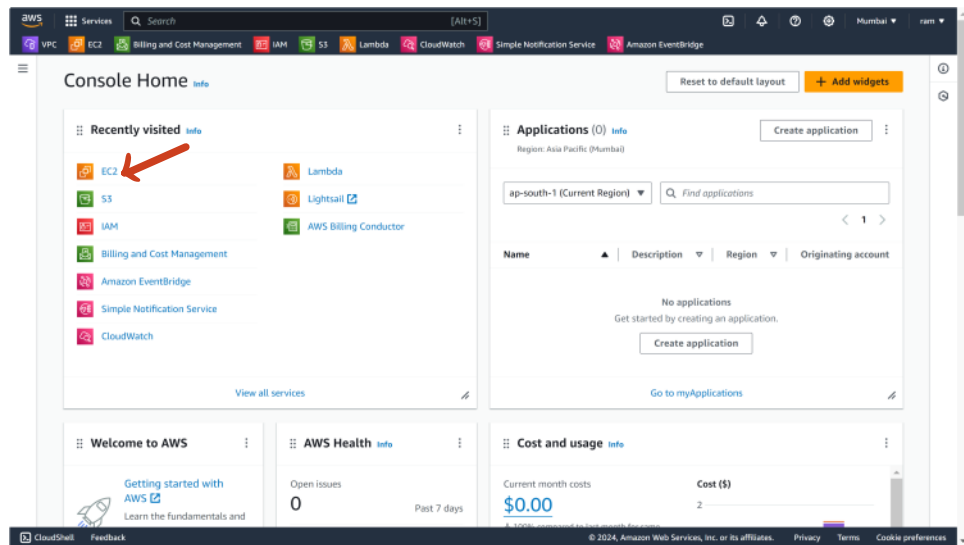# ELASTIC-IP

17 May 2024   12:38

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name

vm1   Add additional tags

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Recents   **Quick Start**

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	SUSE Li	Q Browse more AMIs
aws	Mac	ubuntu	Microsoft	Red Hat	SUSE	Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type   Free tier eligible
ami-0e4fd655fb4e26c30 (64-bit (x86)) / ami-086b081a0a47b5e99 (64-bit (Arm))
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Description

Amazon Linux 2 Kernel 5.10 AMI 2.0.20240503.0 x86_64 HVM gp2

Architecture   AMI ID

64-bit (x86)   ▼   ami-0e4fd655fb4e26c30   Verified provider

▼ Instance type Info | Get advice

Instance type

t2.micro   Free tier eligible
Family: t2   1 vCPU   1 GiB Memory   Current generation: true
On-Demand Linux base pricing: 0.0124 USD per Hour   All generations
On-Demand Windows base pricing: 0.017 USD per Hour
On-Demand RHEL base pricing: 0.0724 USD per Hour   Compare instance types
On-Demand SUSE base pricing: 0.0124 USD per Hour

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

Select   ▼   Create new key pair

Create key pair   ✕

Key pair name
Key pairs allow you to connect to your instance securely.

vm-1

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

- ◉ **RSA**
  RSA encrypted private and public key pair

- ○ **ED25519**
  ED25519 encrypted private and public key pair

Private key file format

- ◉ **.pem**
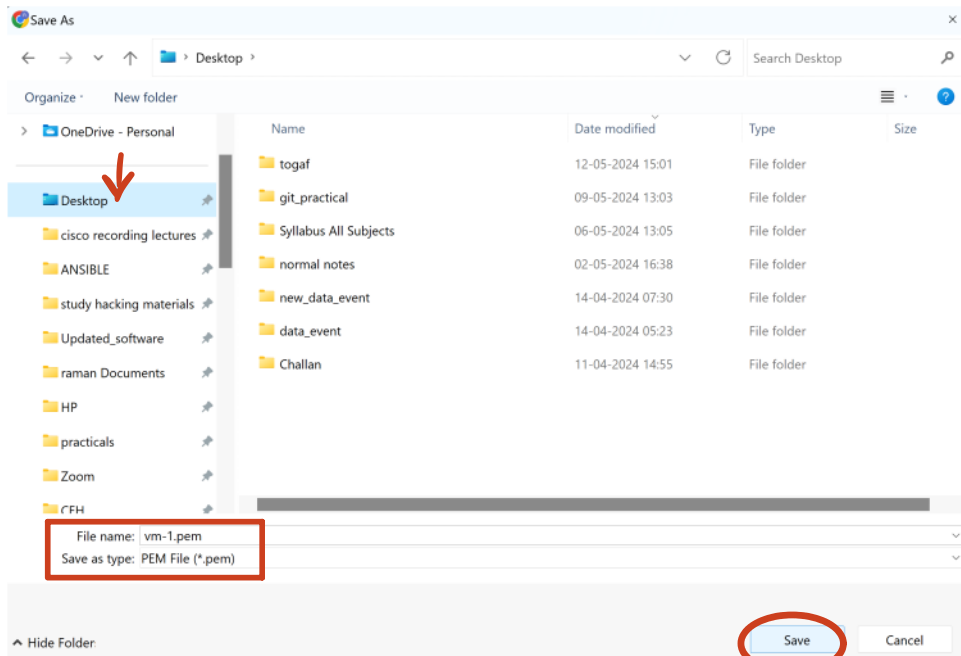 For use with OpenSSH

- ○ **.ppk**
  For use with PuTTY

> ⚠ 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 🔗

Cancel   **Create key pair**

Save As   ×

← → ∨ ↑   📁 › Desktop ›   ∨ C   Search Desktop   🔎

Organize ▾   New folder   ☰ ▾   ❓

> 📁 OneDrive - Personal

Name	Date modified	Type	Size
📁 togaf	12-05-2024 15:01	File folder	
📁 git_practical	09-05-2024 13:03	File folder	
📁 Syllabus All Subjects	06-05-2024 13:05	File folder	
📁 normal notes	02-05-2024 16:38	File folder	
📁 new_data_event	14-04-2024 07:30	File folder	
📁 data_event	14-04-2024 05:23	File folder	
📁 Challan	11-04-2024 14:55	File folder	

📁 Desktop 📌
📁 cisco recording lectures 📌
📁 ANSIBLE 📌
📁 study hacking materials 📌
📁 Updated_software 📌
📁 raman Documents 📌
📁 HP 📌
📁 practicals 📌
📁 Zoom 📌
📁 CEH 📌

File name: vm-1.pem
Save as type: PEM File (*.pem)

∧ Hide Folder   Save   Cancel

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

vm-1   ▼   C Create new key pair

---

aws_notes Page 3

vm-1 ▼ ⟳ Create new key pair

▼ **Network settings** Info   Edit

Network   Info

vpc-033ca4486d55d848b

Subnet   Info

No preference (Default subnet in any availability zone)

Auto-assign public IP   Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)   Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

🔘 Create security group   ⚪ Select existing security group

We'll create a new security group called '**launch-wizard-1**' with the following rules:

☑ Allow SSH traffic from   ┌─────────────────────┐
   Helps you connect to your instance   │ Anywhere   ▼│
                                             │ 0.0.0.0/0   │
                                             └─────────────────────┘

☐ Allow HTTPS traffic from the internet
   To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet
   To set up an endpoint, for example when creating a web server

⚠ 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.

▼ **Network settings** Info

VPC - *required*   Info

┌──┐
│ vpc-033ca4486d55d848b   (default) ▼ │   ⟳
│ 172.31.0.0/16   │
└──┘

Subnet   Info

┌──┐
│ No preference   ▲ │   ⟳ Create new subnet ⧉
├──┤
│ 🔍   │
├──┤
│ No preference   ✓ │
├──┤
│ subnet-024b01ae8779880cb   │
│ VPC: vpc-033ca4486d55d848b   Owner: 211125739636   Availability Zone: ap-south-1a │
│ IP addresses available: 4091   CIDR: 172.31.32   ┌──────────────────────────┐ specific traffic to reach your │
│   │ subnet-024b01ae8779880cb │
│ subnet-04120fbc15521dd5c   └──────────────────────────┘
│ VPC: vpc-033ca4486d55d848b   Owner: 211125739636   Availability Zone: ap-south-1c │
│ IP addresses available: 4091   CIDR: 172.31.16.0/20 │
│ subnet-0901d56e09a638830   │
│ VPC: vpc-033ca4486d55d848b   Owner: 211125739636   Availability Zone: ap-south-1b │
│ IP addresses available: 4091   CIDR: 172.31.0.0/20 │
└──┘

Auto-assign public IP   Info

┌──┐
│ Enable   ▲ │
├──┤
│ Enable   ✓ │
├──┤
│ Disable   │
└──┘

Firewall (security groups)   Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

⚪ Create security group   🔘 Select existing security group

Common security groups Info

┌──┐
│ Select security groups   ▲ │   ⟳ Compare security
└──┘

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

○ Create security group   ● Select existing security group

Common security groups Info

| Select security groups   ▲ |

Q |

☑ default   sg-08701733a6f292197
  VPC: vpc-033ca4486d55d848b

Compare security group rules

▶ Advanced network configuration

▼ Network settings Info

VPC - required Info

vpc-033ca4486d55d848b   (default) ▼
172.31.0.0/16

Subnet Info

subnet-024b01ae8779880cb   ▼
VPC: vpc-033ca4486d55d848b   Owner: 211125739636
Availability Zone: ap-south-1a   IP addresses available: 4091   CIDR: 172.31.32.0/20

Create new subnet ⧉

Auto-assign public IP Info

Disable   ▼

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

○ Create security group   ● Select existing security group

Common security groups Info

| Select security groups   ▼ |

default   sg-08701733a6f292197 ✕
VPC: vpc-033ca4486d55d848b

Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▶ Advanced network configuration

○ Create security group   ● Select existing security group

Common security groups Info

| Select security groups   ▼ |

default   sg-08701733a6f292197 ✕
VPC: vpc-033ca4486d55d848b
Security groups that you add or remove here will be added to or removed from all your network interfaces.

▶ Advanced network configuration

▼ Configure storage Info   Advanced

1x 8   GiB gp3   ▼   Root volume (Not encrypted)

ⓘ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage ✕

Add new volume

⟳ Click refresh to view backup information
The tags that you assign determine whether the instance will be backed up by any
Data Lifecycle Manager policies.

0 x File systems   Edit

▶ Advanced details Info

▼ Summary

Number of instances   Info

1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.4.2...read more
ami-0cc9838aa7ab1dce7

Virtual server type (instance type)
t2.micro

Firewall (security group)
default

Storage (volumes)
1 volume(s) - 8 GiB

Cancel   Launch instance

Review commands

✅ Success
Successfully initiated launch of instance (i-0442a258d38997b66)

▶ Launch log

Next Steps

🔍 What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing and free tier usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

[Create billing alerts ☑]

Connect to your instance

Once your instance is running, log into it from your local computer.

[Connect to instance ☑]

Learn more ☑

Connect an RDS database

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

[Connect an RDS database ☑]

Create a new RDS database ☑

Learn more ☑

Create EBS snapshot policy

Create a policy that automates the creation, retention, and deletion of EBS snapshots.

[Create EBS snapshot policy ☑]

Manage detailed monitoring

Enable or disable detailed monitoring for the instance. If you enable detailed monitoring, the Amazon EC2 console displays monitoring graphs with a 1-minute period.

Create Load Balancer

Create a application, network gateway or classic Elastic Load Balancer

[Create Load Balancer ☑]

Create AWS budget

AWS Budgets allows you to create budgets, forecast spend, and take action on your costs and usage from a single location.

Manage CloudWatch alarms

Create or update Amazon CloudWatch alarms for the instance.

[Manage CloudWatch alarms ☑]

Instances Info

🔍 Find Instance by attribute or tag (case-sensitive)

[Instance state = running ✕] [Clear filters]

All st... Refresh instances

[↻] Connect Instance state ▼ Actions ▼ Launch instances ▼

< 1 > ⚙

☐	Name ✎	▽	Instance ID	Instance state	▽	Availability Zone	▽	Public IPv4 ...	▽	Private IP ad...	▽	Security group name	▽	Key name

No matching instances found

Instances (1) Info

🔍 Find Instance by attribute or tag (case-sensitive)

[Instance state = running ✕] [Clear filters]

All states ▼

[↻] Connect Instance state ▼ Actions ▼ Launch instances ▼

< 1 > ⚙

☐	Name ✎	▽	Instance ID	Instance state	▽	Availability Zone	▽	Public IPv4 ...	▽	Private IP ad...	▽	Security group name	▽	Key name
☐	vm1		i-0442a258d38997b66	✅ Running 🔍 🔍		ap-south-1a		–		172.31.42.106		default		vm-1

Instances (1/1) Info

🔍 Find Instance by attribute or tag (case-sensitive)

[Instance state = running ✕] [Clear filters]

All states ▼

[↻] Connect Instance state ▼ Actions ▼ Launch instances ▼

< 1 > ⚙

☑	Name ✎	▽	Instance ID	Instance state	▽	Availability Zone	▽	Public IPv4 ...	▽	Private IP ad...	▽	Security group name	▽	Key name
☑	vm1		i-0442a258d38997b66	✅ Running 🔍 🔍		ap-south-1a		–		172.31.42.106		default		vm-1

---

i-0442a258d38997b66 (vm1)

⚙ ✕

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

▼ **Instance summary** Info

Instance ID
📋 i-0442a258d38997b66 (vm1)

Public IPv4 address
–

Private IPv4 addresses
📋 172.31.42.106

IPv6 address
–

Instance state
✅ Running

Public IPv4 DNS
–

Hostname type
IP name: ip-172-31-42-106.ap-south-1.compute.internal

Private IP DNS name (IPv4 only)
📋 ip-172-31-42-106.ap-south-1.compute.internal

Answer private resource DNS name
–

Instance type
t2.micro

Elastic IP addresses
–

Auto-assigned IP address
–

VPC ID
📋 vpc-033ca4486d55d848b ☑

AWS Compute Optimizer finding
ⓘ Opt-in to AWS Compute Optimizer for recommendations. |
Learn more ☑

IAM Role
–

Subnet ID
📋 subnet-024b01ae8779880cb ☑

Auto Scaling Group name
–

Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New

▼ **Images**
AMIs
AMI Catalog

▼ **Elastic Block Store**
Volumes
Snapshots
Lifecycle Manager

▼ **Network & Security**
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces

▼ **Load Balancing**
Load Balancers
Target Groups
Trust Stores New

▼ **Auto Scaling**
Auto Scaling Groups

Instances (1/1) Info

🔍 Find Instance by attribute or tag (case-sensitive)

[Instance state = running ✕] [Clear filters]

All states ▼

[↻] Connect Instance state ▼ Actions ▼ Launch instances ▼

< 1 > ⚙

☑	Name ✎	▽	Instance ID	Instance state	▽	Availability Zone	▽	Public IPv4 ...	▽	Private IP ad...	▽	Security group name	▽	Key name
☑	vm1		i-0442a258d38997b66	✅ Running 🔍 🔍		ap-south-1a		–		172.31.42.106		default		vm-1

i-0442a258d38997b66 (vm1)

⊕ ✕

Details | Status and alarms New | Monitoring | Security | Networking | Storage | Tags

▼ **Instance summary** Info

Instance ID
📋 i-0442a258d38997b66 (vm1)

Public IPv4 address
–

Private IPv4 addresses
📋 172.31.42.106

IPv6 address
–

Instance state
✅ Running

Public IPv4 DNS
–

Hostname type
IP name: ip-172-31-42-106.ap-south-1.compute.internal

Private IP DNS name (IPv4 only)
📋 ip-172-31-42-106.ap-south-1.compute.internal

Answer private resource DNS name
–

Instance type
t2.micro

Elastic IP addresses
–

Auto-assigned IP address
–

VPC ID
📋 vpc-033ca4486d55d848b ☑

AWS Compute Optimizer finding
ⓘ Opt-in to AWS Compute Optimizer for recommendations. |
Learn more ☑

IAM Role
–

Subnet ID
📋 subnet-024b01ae8779880cb ☑

Auto Scaling Group name
–

Elastic IP addresses

Find resources by attribute or tag

	Name ▽	Allocated IPv4 addr... ▽	Type	▽	Allocation ID	▽	Reverse DNS record	▽	Associa

No Elastic IP addresses found in this Region

EC2 > Elastic IP addresses > Allocate Elastic IP address

Allocate Elastic IP address Info

Elastic IP address settings Info

Network border group Info

🔍 ap-south-1   ✕

Public IPv4 address pool

⦿ Amazon's pool of IPv4 addresses

◯ Public IPv4 address that you bring to your AWS account with BYOIP. (option disabled because no pools found) Learn more 🔗

◯ Customer-owned pool of IPv4 addresses created from your on-premises network for use with an Outpost. (option disabled because no customer owned pools found) Learn more 🔗

Global static IP addresses

AWS Global Accelerator can provide global static IP addresses that are announced worldwide using anycast from AWS edge locations. This can help improve the availability and latency for your user traffic by using the Amazon global network. Learn more 🔗

Create accelerator 🔗

Network border group Info

🔍 ap-south-1   ✕

Public IPv4 address pool

⦿ Amazon's pool of IPv4 addresses

◯ Public IPv4 address that you bring to your AWS account with BYOIP. (option disabled because no pools found) Learn more 🔗

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Global static IP addresses

AWS Global Accelerator can provide global static IP addresses that are announced worldwide using anycast from AWS edge locations. This can help improve the availability and latency for your user traffic by using the Amazon global network. Learn more 🔗

Create accelerator 🔗

Tags - *optional*

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

Add new tag

You can add up to 50 more tag

Cancel   Allocate

⊘ Elastic IP address allocated successfully.
Elastic IP address 13.202.97.1   Associate this Elastic IP address   ✕

Elastic IP addresses (1)   Actions ▼   Allocate Elastic IP address

Find resources by attribute or tag

Elastic IP address allocated successfully.
Elastic IP address 13.202.97.1

Associate this Elastic IP address

Elastic IP addresses (1)

Find resources by attribute or tag

Public IPv4 address : 13.202.97.1 ✕   Clear filters

	Name	Allocated IPv4 addr...	Type	Allocation ID	Reverse DNS record	Associ...
☐	-	13.202.97.1	Public IP	eipalloc-0c4441f5d0435c7b4	-	-

Elastic IP addresses (1/1)

Find resources by attribute or tag

Public IPv4 address : 13.202.97.1 ✕   Clear filters

☑	Name	Allocated IPv4 addr...	Type	Allocation ID	Reverse DNS record	Associ...
☑	-	13.202.97.1	Public IP	eipalloc-0c4441f5d0435c7b4	-	-

13.202.97.1

Summary | Tags

Summary

Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
13.202.97.1	Public IP	eipalloc-0c4441f5d0435c7b4	-

Association ID	Scope	Associated instance ID	Private IP address
-	VPC	-	-

Network interface ID	Network interface owner account ID	Public DNS	NAT Gateway ID
-	-	-	-

Address pool	Network border group		
Amazon	ap-south-1		

Elastic IP addresses (1/1)

Find resources by attribute or tag

Public IPv4 address : 13.202.97.1 ✕   Clear filters

Actions ▲   Allocate Elastic IP address

View details
Release Elastic IP addresses
Associate Elastic IP address
Disassociate Elastic IP address
Update reverse DNS
Enable transfers
Disable transfers
Accept transfers

☑	Name	Allocated IPv4 addr...	Type	Allocation ID		Associ...
☑	-	13.202.97.1	Public IP	eipalloc-0c4441f5d0435c		-

EC2 > Elastic IP addresses > Associate Elastic IP address

Associate Elastic IP address Info

Choose the instance or network interface to associate to this Elastic IP address (13.202.97.1)

Elastic IP address: 13.202.97.1

Resource type
Choose the type of resource with which to associate the Elastic IP address.

◉ Instance
○ Network interface

⚠ If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more☐

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

Instance

Choose an instance

i-0442a258d38997b66 (vm1) - running

The private IP address with which to associate the Elastic IP address.

Choose a private IP address

Reassociation
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.

☐ Allow this Elastic IP address to be reassociated

Cancel   **Associate**

EC2 > Elastic IP addresses > Associate Elastic IP address

Associate Elastic IP address Info
Choose the instance or network interface to associate to this Elastic IP address (13.202.97.1)

Elastic IP address: 13.202.97.1

Resource type
Choose the type of resource with which to associate the Elastic IP address.
○ Instance
○ Network interface

⚠ If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more ↗

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

Instance
🔍 i-0442a258d38997b66   ✕   ↻

Private IP address
The private IP address with which to associate the Elastic IP address.
🔍 Choose a private IP address
172.31.42.106
Specify whether the [172.31.42.106] be reassociated with a different resource if it already associated with a resource.
☐ Allow this Elastic IP address to be reassociated

Cancel   **Associate**

EC2 > Elastic IP addresses > Associate Elastic IP address

Associate Elastic IP address Info
Choose the instance or network interface to associate to this Elastic IP address (13.202.97.1)

Elastic IP address: 13.202.97.1

Resource type
Choose the type of resource with which to associate the Elastic IP address.
○ Instance
○ Network interface

⚠ If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more ↗

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

Instance
🔍 i-0442a258d38997b66   ✕   ↻

Private IP address
The private IP address with which to associate the Elastic IP address.
🔍 172.31.42.106   ✕

Reassociation
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.
☑ Allow this Elastic IP address to be reassociated

Cancel   **Associate**

GO TO INSTANCE