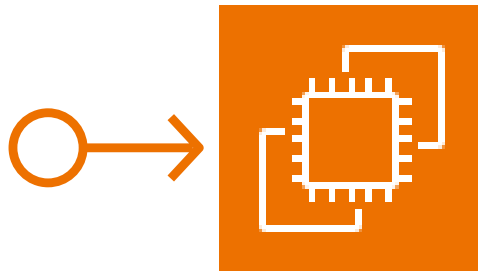




AWS Solution Architect Training with AWS Cloud Practitioner Global Certification Training

Trainer: Aravindraaj.G- N minds Academy

Configure Elastic IP Address to Windows Web Server in AWS



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Objective

An Elastic IP (EIP) in AWS is a static, public IP address designed for dynamic cloud computing. It is associated with your AWS account and can be quickly associated or disassociated with any EC2 instance in your account. This feature is particularly useful when you need to maintain a consistent IP address for your resources, even when you stop and start EC2 instances.

Common Use Cases for Elastic IP:

1. Highly Available Applications:

- If you're running a service that requires high availability, you can use Elastic IPs to quickly reassign a static IP to a new instance if your primary instance fails, ensuring minimal downtime.

2. Web Servers:

- If you host a website and need to ensure the IP address remains the same even if the underlying EC2 instance is restarted, an Elastic IP helps maintain this consistency.

3. Disaster Recovery:

- Elastic IPs are useful for disaster recovery scenarios. If one instance goes down, you can quickly associate the EIP with a backup instance to ensure services are still accessible.

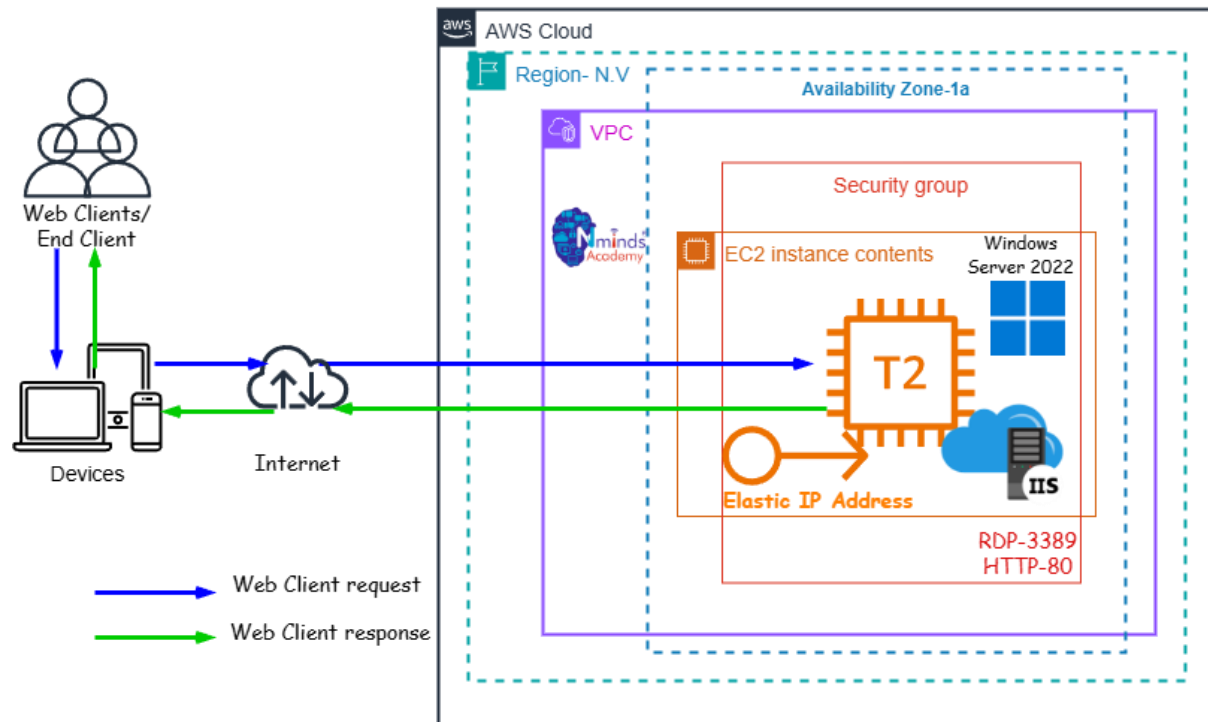
Best Practices:

- Use Elastic IPs only when necessary: Since they come with associated costs when unused, it's a good practice to release EIPs that are no longer required.
- Move IPs during instance failure: Instead of keeping an EIP permanently attached, use it as a failover method, reassociating it to a new instance when needed.
- Monitor EIP Usage: Periodically review your usage to ensure you're not paying for unnecessary Elastic IP addresses.



Topology

How to Configure the Elastic IP Address to Windows Web Server with AWS EC2



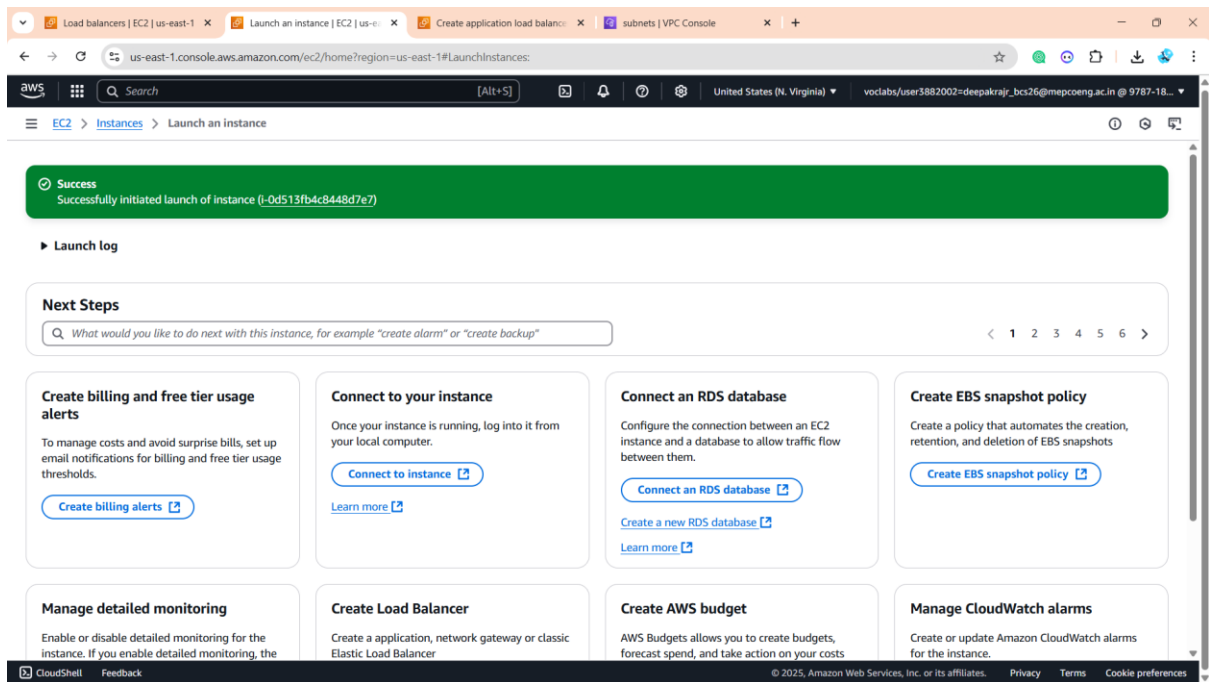
Execution Tasks:

Step1: Navigate to EC2 instance dashboard and Launch a Windows EC2 Instance

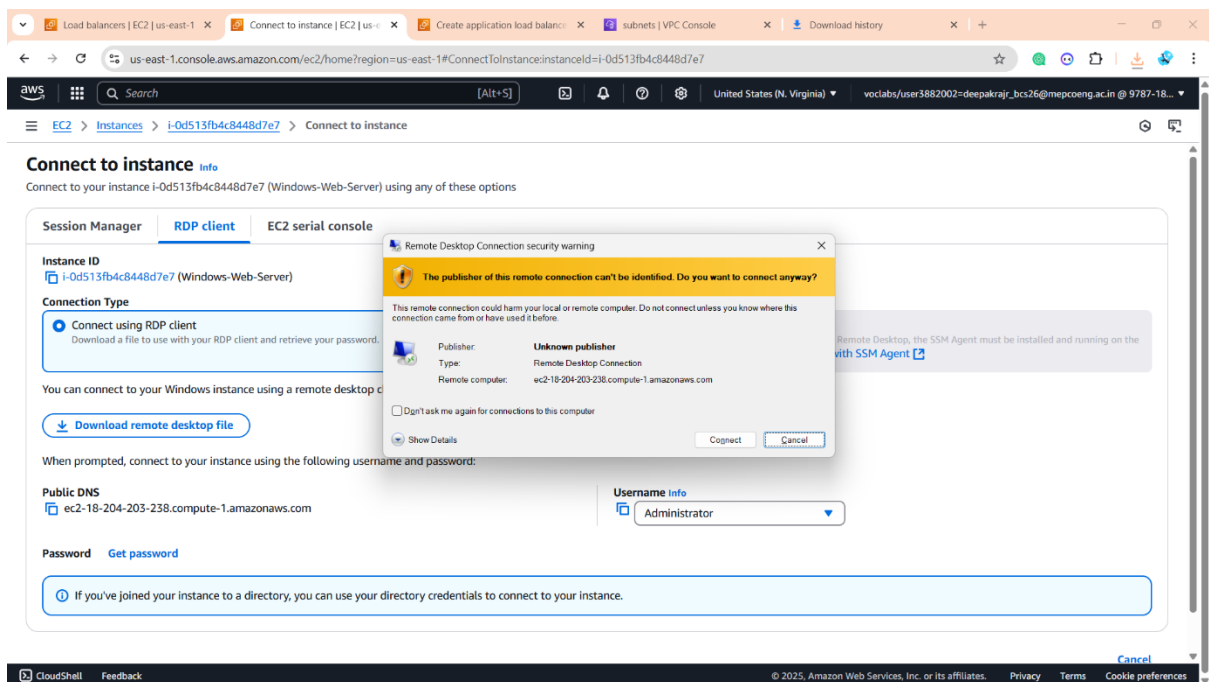
The screenshot shows the AWS Management Console 'Launch an instance' page. The 'Regions' dropdown menu is open, showing a list of regions categorized by continent: United States, Asia Pacific, Canada, Europe, and South America. The 'Summary' panel on the right shows the default configuration for a new instance, including the Amazon Linux 2023 AMI, t3.micro instance type, and default security group and storage.

The screenshot shows the AWS Management Console 'Launch an instance' page with the 'Microsoft Windows Server 2025 Base' AMI selected. The 'Instance type' dropdown is set to 't3.micro'. The 'Summary' panel on the right shows the configuration for the selected AMI and instance type, including the default security group and storage.





Step2: Connect to the Instance and Configure IIS and Download the RDP file from the Connect button



Step3: Use the Administrator password, retrieve it via Get Password using the .pem file.



us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#GetWindowsPassword:instanceId=i-0d513fb4c8448d7e7;previousPlace=ConnectToInstance;lang=English

Get Windows password

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID
i-0d513fb4c8448d7e7 (Windows-Web-Server)

Key pair associated with this instance
Windows-Key-Pair

Private key
Either upload your private key file or copy and paste its contents into the field below.

Upload private key file

Windows-Key-Pair.pem
1.674KB

Private key contents - optional

```
-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEAjZkGfE8ghx5FoxgWuto3v2/mPIVY774WtCLbfsGxQo/GX
sUXSyZb6dAJ7yjdGNGECaGAYFZLxd6LiqAdfGpCUHfEL+Kcc9w7Mm570ImpTukk
w8fNyt64TeC2PsfDNmDslpfeK65MTJaTr3DBc+FbmeYCTMyqgmUtdXb9n
GPxs1jyWwxEbjNrAITU8/pTLX+X051Wz54NRN1Ow+PLOmJCnVP6uMg3NIFP6x
fhwz3Dve/UfIDAgBfry5OcbKjps2Ocd26agZKXS/gk7K6f+9892B/hc9TR/Ud
Njv1TweXNvSCMazmCjpMLAH/143thgDoOzWIDAQAABAB1x9GpWAdenyXvD
QyVqcyohgizQz3h7GLaNsKnqdKDOae08TA7f7hXUSi49adexz1XmdkjNdndohZ
-----
```

Cancel Decrypt password

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Step4: Navigate to Elastic IP

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Addresses:

Elastic IP addresses

Find resources by attribute or tag

Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
No Elastic IP addresses found in this Region				

View IP address usage and recommendations to release unused IPs with [Public IP insights](#)

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Step5: Associate with Instance



Load balancers | EC2 | us-east-1 | Associate Elastic IP address | EC2 | Create application load balancer | subnets | VPC Console | Download history

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#AssociateAddress:PublicIp=52.7.249.179

EC2 > Elastic IP addresses > Associate Elastic IP address

Associate Elastic IP address

Choose the instance or network interface to associate to this Elastic IP address (52.7.249.179)

Elastic IP address: 52.7.249.179

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

☒ Instance
☐ Network interface

Instance
Choose an instance

Private IP address
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

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Step: Return to Instances, select Windows-Web-Server, and confirm the Public IPv4 now shows the EIP

Load balancers | EC2 | us-east-1 | Elastic IP addresses | EC2 | Create application load balancer | subnets | VPC Console | Download history

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Addresses:PublicIp=52.7.249.179

EC2

Dashboard
EC2 Global View
Events

Instances
Instances
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Savings Plans
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Elastic Block Store
Volumes
Snapshots
Lifecycle Manager

Network & Security

Elastic IP address associated successfully.
Elastic IP address 52.7.249.179 has been associated with instance i-0d513fb4c8448d7e7

Elastic IP addresses (1)

Find resources by attribute or tag

Public IPv4 address: 52.7.249.179 Clear filters

	Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
<input type="checkbox"/>	-	52.7.249.179	Public IP	elpallo-0d12fa39117f8b4d	-

View IP address usage and recommendations to release unused IPs with [Public IP insights](#)

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