

Allocating Elastic IP Address

Elastic I.P :An Elastic IP address is a reserved public IP address that you can assign to any EC2 instance in a particular region, until you choose to release it.

Procedure:

1. Launch an ec2 instance-> select instance type as t2micro.

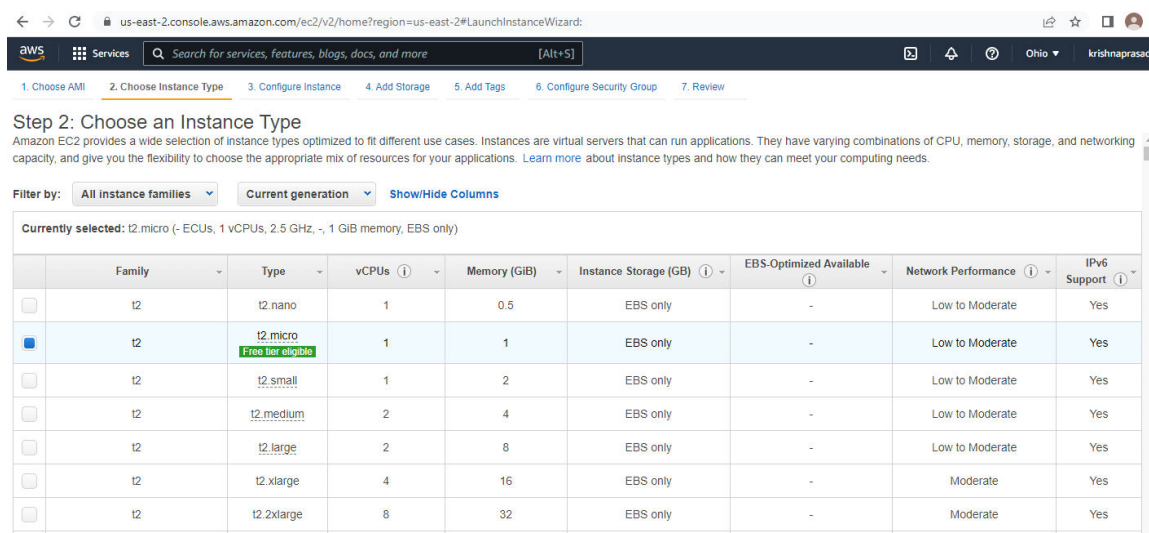
- * configure instance details.

- * Add storage.

- * Add Tags.

- * Change security groups.

- *Review and Launch.



us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

aws Services Search for services, features, blogs, docs, and more [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, -, 1 GiB memory, EBS only)

	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 Free tier eligible	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

2. Now use "SUDO SHUTDOWN " command and change the instance type to t2micro. Again the start the instance and check the instance ip

address change.

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#Instances:v=3

Instance type changed successfully

Successfully started i-04a9dcd7ded4b94c8

Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
Elastic ip	i-04a9dcd7ded4b94c8	Running	t2.nano	2/2 checks passed	No alarms	us-east-2c

Instance: i-04a9dcd7ded4b94c8 (Elastic ip)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Instance ID: i-04a9dcd7ded4b94c8 (Elastic ip)

Public IPv4 address: 3.19.26.94 | open address

Private IPv4 addresses: 172.31.34.41

IPv6 address: -

Instance state: Running

Public IPv4 DNS: -

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#Instances:v=3

Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
Elastic ip	i-04a9dcd7ded4b94c8	Initializing	t2.micro	1/2 checks failed	No alarms	us-east-2c

Instance: i-04a9dcd7ded4b94c8 (Elastic ip)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Instance ID: i-04a9dcd7ded4b94c8 (Elastic ip)

Public IPv4 address: 3.141.103.242 | open address

Private IPv4 addresses: 172.31.34.41

IPv6 address: -

Instance state: Initializing

Public IPv4 DNS: ec2-3-141-103-242.us-east-

3. To avoid the change in instance ip address we associate elastic ip address.

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#Addresses:public-ip=18.218.147.116

Elastic IP address associated successfully. Elastic IP address 18.218.147.116 has been associated with instance i-04a9dcd7ded4b94c8

Elastic IP addresses (1/1)

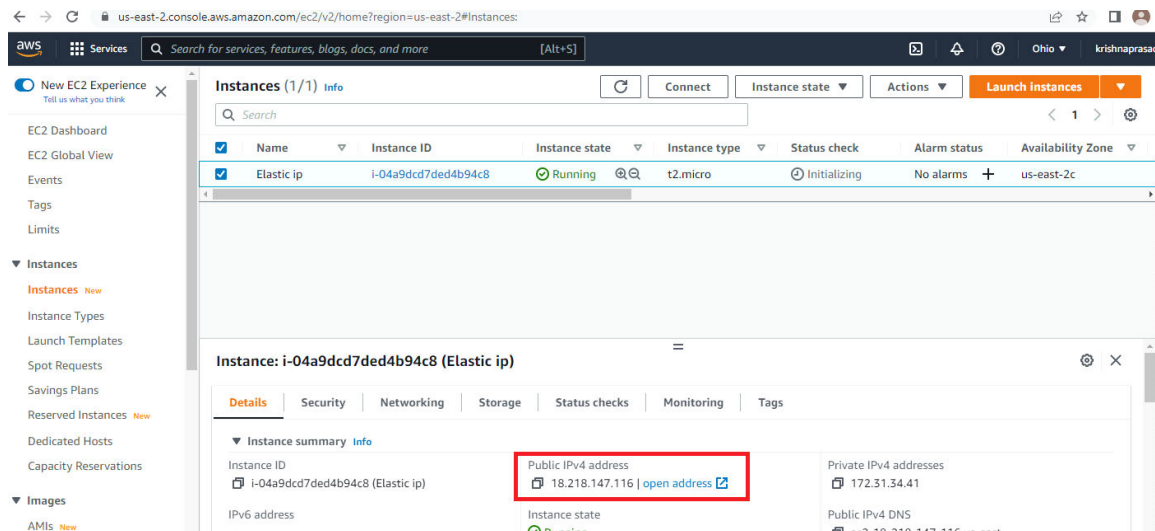
Filter Elastic IP addresses

Public IPv4 address: 18.218.147.116

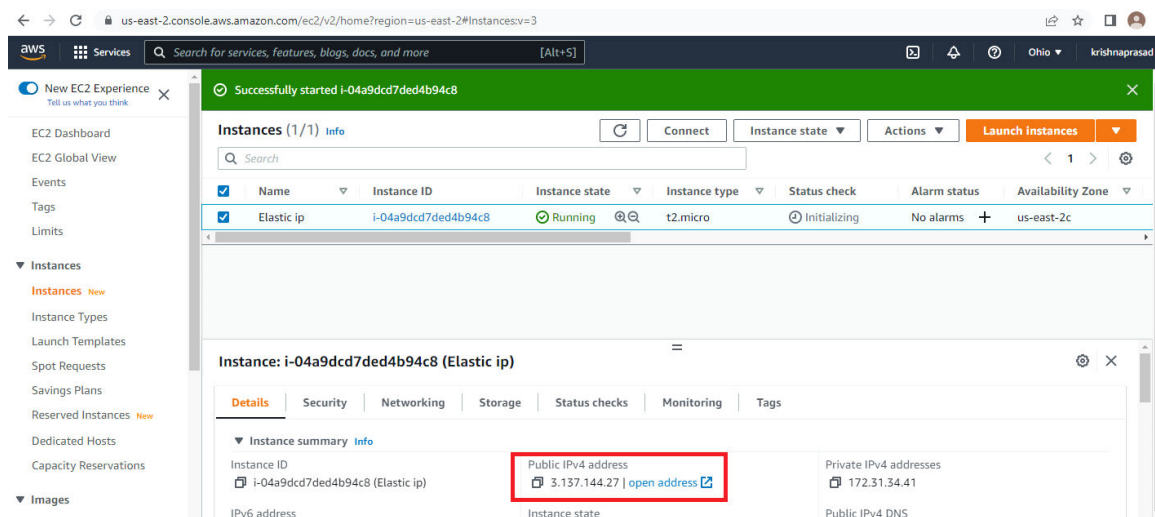
Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record
-	18.218.147.116	Public IP	eipalloc-0098da2f34a9d02f5	-

18.218.147.116

4. After associating elastic ip to the instance, you can see the instance ip is changed to elastic ip. Even when you shutdown and start the instance elastic ip address doesn't change.



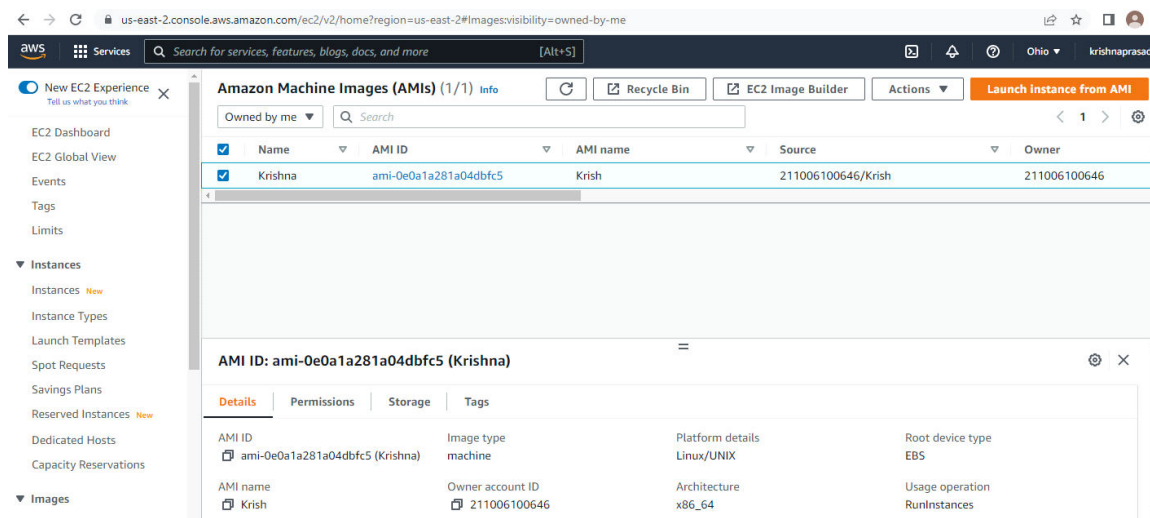
5. Disassociate the elastic ip address from your instance and check whether the ip address changed.



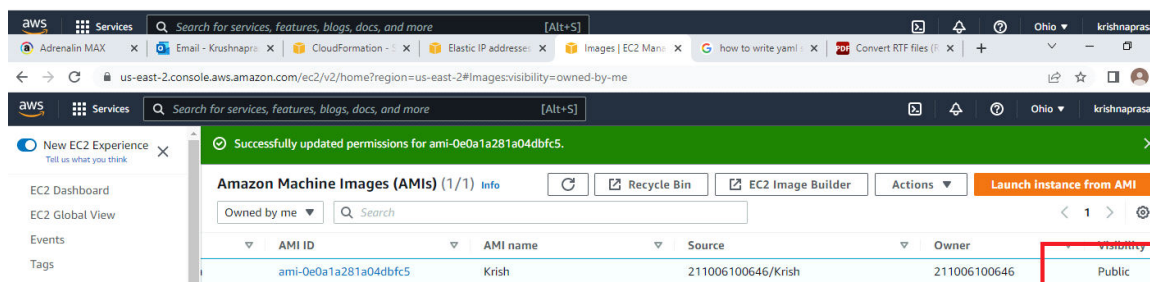
Creating Amazon Machine Image:

1. Select the Instance -> go to actions
2. Select image and template.
3. Click on create image.

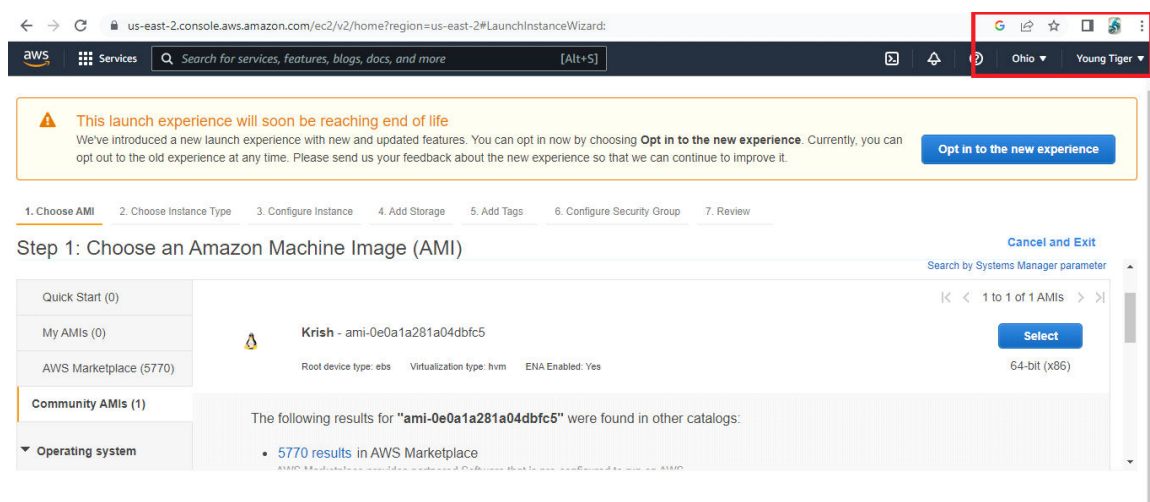
4. Give a name and create image.



5. Select the image and click on actions and change the visibility to public.



6. Share the Ami id to others and check the ami is available or not.



Conclusion: Associate and disassociate the elastic ip along with creating a amazon machine image.

