

Module 10: Hands-On- Creating an Elastic Network Interface

Step 1: Go to Network Interfaces under the EC2 dashboard and select Create Network Interface.

Create Network Interface **Attach** **Detach** **Delete** **Actions** ▼

Filter by tags and attributes or search by keyword

<input type="checkbox"/>	Name	Network interf:	Subnet ID	VPC ID	Zone
<input type="checkbox"/>		eni-01550550b...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d
<input type="checkbox"/>		eni-0b7c03edb...	subnet-5cc2cc53	vpc-8a0c6cf0	us-east-1f
<input type="checkbox"/>		eni-0e41e8537...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d
<input type="checkbox"/>		eni-0f9a16ca5...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d

Step 2: Then provide an apt description (optional) and then choose the Subnet under which your instance is available or under which you will create the instance. Also, choose the security group for the Network Interface.

Create Network Interface

Description ⓘ

Subnet* ⓘ ⓘ

IPv4 Private IP ☒ Auto-assign ⓘ ☐ Custom

Elastic Fabric Adapter ☐ ⓘ

Security groups* ⓘ

Step 3: The Network Interface has been successfully created.

<div> <div>Create Network Interface</div> <div>Attach</div> <div>Detach</div> <div>Delete</div> <div>Actions ▾</div> </div>							
<div> <div>Filter by tags and attributes or search by keyword</div> <div>?</div> <div>K</div> <div><</div> </div>							
<input type="checkbox"/>	Name ▾	Network interf. ▴	Subnet ID ▾	VPC ID ▾	Zone ▾	Security groups ▾	Description ▾
<input type="checkbox"/>		eni-01550550b...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d	launch-wizard-40	
<input type="checkbox"/>	hands-on-ENI	eni-05dbd3bd2...	subnet-544d19...	vpc-8a0c6cf0	us-east-1a	launch-wizard-38	hands-on-eni
<input type="checkbox"/>		eni-0b7c03edb...	subnet-5cc2cc53	vpc-8a0c6cf0	us-east-1f	d-9067727165_con...	AWS created n...
<input type="checkbox"/>		eni-0e41e8537...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d	launch-wizard-40	
<input type="checkbox"/>		eni-0f9a16ca5...	subnet-91a1f0cd	vpc-8a0c6cf0	us-east-1d	d-9067727165_con...	AWS created n...

Step 4: Now, while creating your EC2 instance, under Configure Instance, go to Network Interfaces and choose the Network interface which you just created.

Note: The Network Interface will be only visible if you entered the right subnet

▼ Network interfaces ⓘ

Device	Network Interface	Subnet	Primary IP	Secondary IP addresses
eth0	eni-05dbd3bd21ec7cc ▾	subnet-544d1933 ▾	Auto-assign	



We can no longer assign a public IP address to your instance

The auto-assign public IP address feature for this instance is disabled because you have selected an existing network interface assigned to new network interfaces for eth0. To re-enable the auto-assign public IP address feature, please select a new network interface.

Step 6: Here, the Interface ID of the network interface is visible under the instance details.

<input type="checkbox"/>	Name ▾	Instance ID ▾	Instance Type ▾	Availability Zone ▾	Instance State ▾
<input checked="" type="checkbox"/>	ENI-handson	i-07415816105b7c570	t2.micro	us-east-1a	running
<input type="checkbox"/>	ser1	i-0ce54208e0912b4ae	t2.micro	us-east-1d	terminated
<input type="checkbox"/>	ser2	i-00f525d6fea87c160	t2.micro	us-east-1d	terminated

Subnet ID	subnet-544d1933
Network interfaces	eth0
IAM role	
Key pair name	
Owner	
Launch time	
Termination protection	
Lifecycle	
Monitoring	

Network Interface eth0	
Interface ID	eni-05dbd3bd21ec7cc65
VPC ID	vpc-8a0c6cf0
Attachment Owner	463413326815
Attachment Status	attached
Attachment Time	Wed Apr 01 13:28:01 GMT+530 2020

Step 7: Now let us allocate an Elastic IP address to attach to the Network Interface

EC2 > Elastic IP addresses

Elastic IP addresses (1/1) Refresh Actions Allocate Elastic IP address

<input checked="" type="checkbox"/>	Name	Public IPv4 address	Allocation ID	Associated instance
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Step 8: Now, click Allocate to create an Elastic IP address

Allocate Elastic IP address

Allocate an Elastic IP address by selecting the public IPv4 address pool from which the public IP address is to be allocated. Elastic IP addresses incur charges if they are not associated with a running instance or a network interface that is attached to a running instance. [Learn more](#)

Elastic IP address settings

Public IPv4 address pool

Public IP addresses are allocated from Amazon's pool of public IP addresses, from a pool that you own and bring to your account, or from a pool that you own and continue to advertise..

- ☒ Amazon's pool of IPv4 addresses
- ☐ Public IPv4 address that you bring to your AWS account(option disabled because no pools found) [Learn more](#)
- ☐ Customer owned pool of IPv4 addresses(option disabled because no customer owned pools found) [Learn more](#)

Cancel

Allocate

Step 9: Elastic IP address is successfully created.

✓ Elastic IP address allocated.
Elastic IP address 34.193.226.1 Associate this Elastic IP address ×

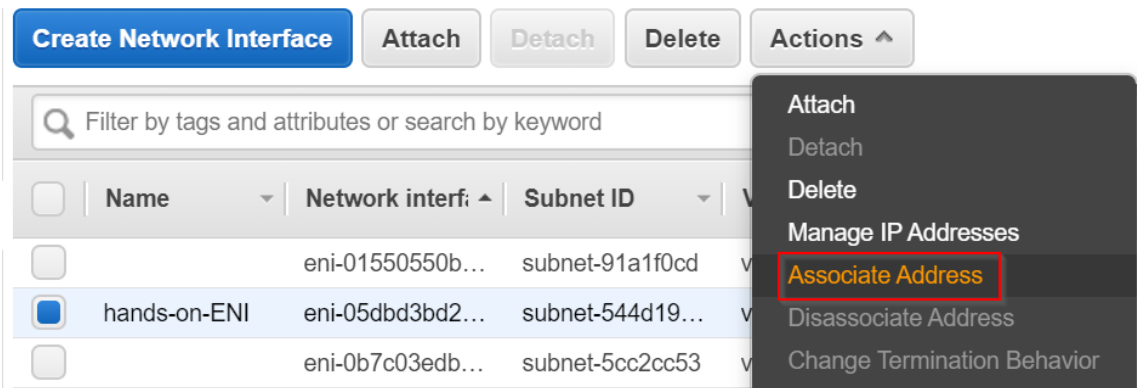
EC2 > Elastic IP addresses

Elastic IP addresses (1/1) Refresh Actions Allocate Elastic IP address

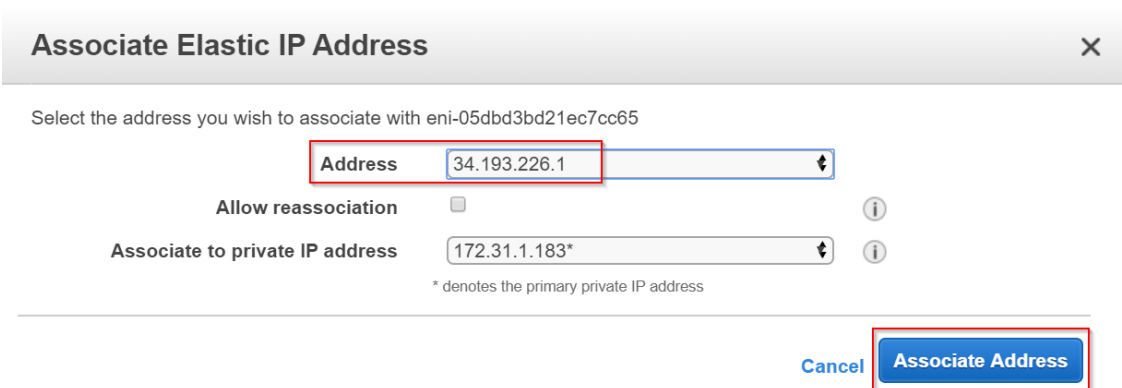
Public IPv4 address: 34.193.226.1 × Clear filters

<input checked="" type="checkbox"/>	Name	Public IPv4 address	Allocation ID	Associated instance
<input checked="" type="checkbox"/>		34.193.226.1	eipalloc-04eb4718f53030b13	-

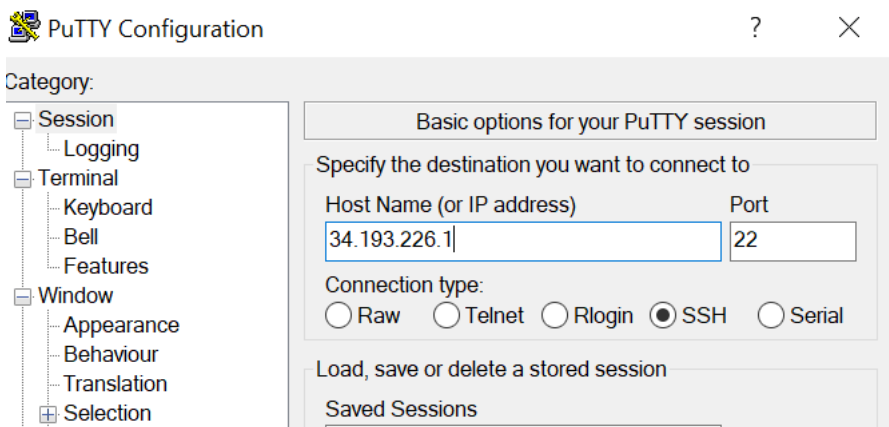
Step 10: Now, select the Network Interface you want to attach the IP to. Actions → Associate Address.



Step 11: As shown below, attach the IP and click on Associate Address



Step 12: Now, let us check whether the instance opens with associated IP address



Step 13: The session started successfully! We have created an ENI and attached it to an EIP.

```
ubuntu@ip-172-31-1-183: ~  
System information as of Wed Apr  1 08:18:32 UTC 2020  
  
System load:  0.0                Processes:            87  
Usage of /:   13.6% of 7.69GB    Users logged in:     0  
Memory usage: 15%              IP address for eth0: 172.31.1.183  
Swap usage:   0%  
  
0 packages can be updated.  
0 updates are security updates.  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
ubuntu@ip-172-31-1-183:~$
```