

## How to Add Multiple IP Addresses to a Firewall in AWS

<https://campus.barracuda.com/doc/73700386/>

In some cases, you may need multiple IP addresses on a single network interface, for example to host multiple services running on the same port behind the firewall. For each private IP address on the instance, an Elastic IP address is associated. The maximum number of private IP addresses depends on the instance type.

### Before You Begin

- Deploy a firewall instance in AWS. For more information, see [Amazon AWS Deployment](#).

### Step 1. Add Private IP Addresses to the Network Interface

Depending on the instance type, you can add multiple additional private IP addresses to the network interface.

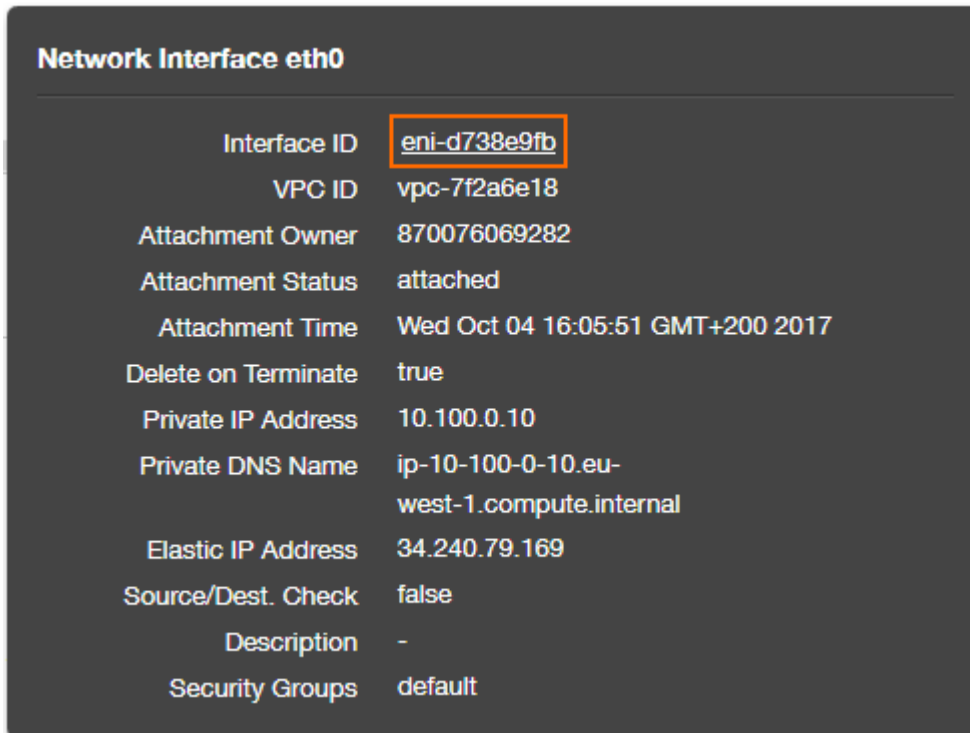
1. Log into the AWS console.
2. Click **Services** and select **EC2**.
3. In the **INSTANCES** section of the left menu, click **Instances**.
4. Select the firewall instance.
5. In the **Description** tab for the firewall instance, locate the **Network Interfaces** parameter and click on **eth0**. The **Network Interface eth0** popover opens.

Instance: [i-07998341b36f7ec71 \(HQ-NQF1\)](#) Elastic IP: [34.240.79.169](#)

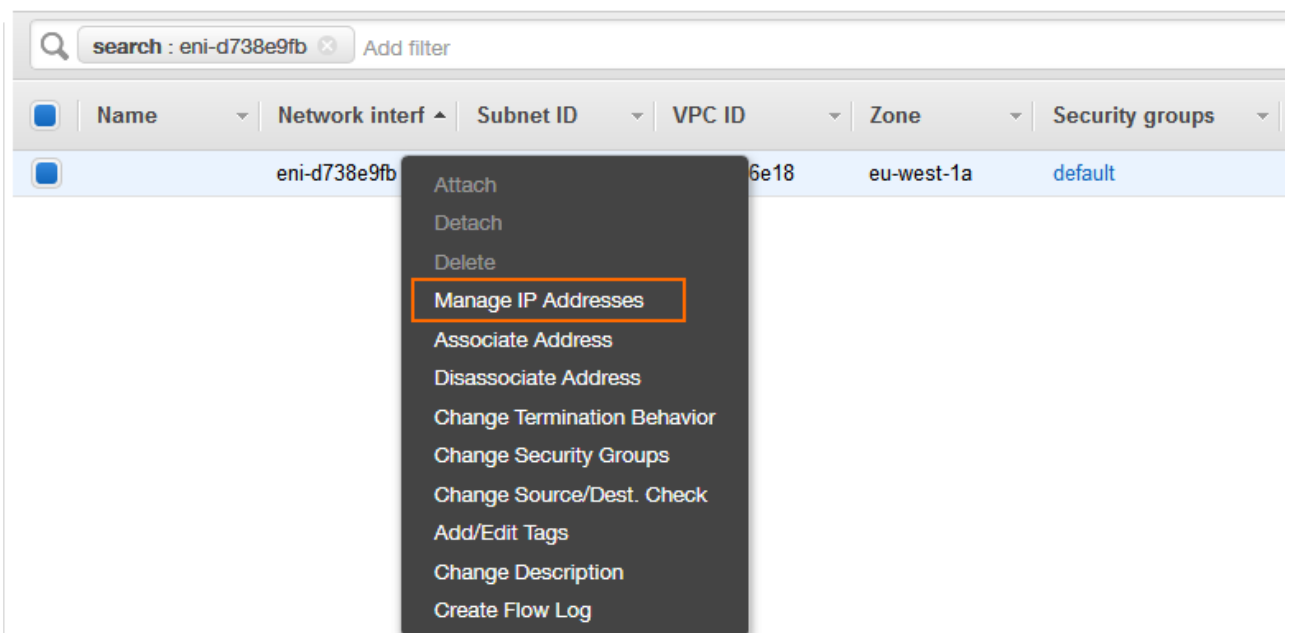
[Description](#)
[Status Checks](#)
[Monitoring](#)
[Tags](#)

Instance ID	i-07998341b36f7ec71	Public DNS (IPv4)	ec2-34-240-79-169.eu-west-1.compute.amazonaws.com
Instance state	running	IPv4 Public IP	<a href="#">34.240.79.169</a>
Instance type	t2.small	IPv6 IPs	-
Elastic IPs	<a href="#">34.240.79.169*</a>	Private DNS	ip-10-100-0-10.eu-west-1.compute.internal
Availability zone	eu-west-1a	Private IPs	10.100.0.10
Security groups	<a href="#">default</a> · <a href="#">view inbound rules</a>	Secondary private IPs	
Scheduled events	No scheduled events	VPC ID	vpc-7f2a6e18
AMI ID	<a href="#">CudaNGFHourly-v711-056-HF846-20171004 (ami-7ed40307)</a>	Subnet ID	subnet-3b21525c
Platform	-	Network interfaces	<a href="#">eth0</a>
IAM role	<a href="#">NextGenFirewallRole</a>	Source/dest. check	False

6. Click the **Interface ID**. The filtered list of network interfaces is displayed.



7. Right-click the network interface and select **Manage IP Addresses**.



8. Click **Assign new IP**

9. (optional) Enter a unique **Private IP**. Leave empty for a free IP address in the subnet to be automatically assigned.

**Manage IP Addresses** ✕

You can assign and unassign IPv4 and IPv6 IP addresses on each network interface. Leave the IP address field blank and an available address will be assigned or enter an IP address that you want to assign.

To add or edit an IPv4 public IP [Allocate an Elastic IP](#) to this instance or network interface.

▼ **eth0: eni-d738e9fb - 10.100.0.0/24**

**IPv4 Addresses**

Private IP	Public IP
10.100.0.10	34.240.79.169
10.100.0.15	<a href="#">Undo</a>
<a href="#">Assign new IP</a>	

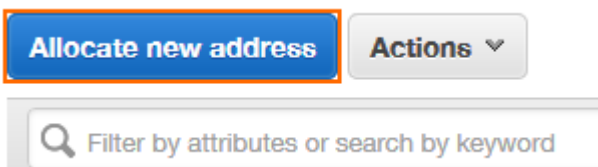
Allow reassignment i

Cancel
Yes, Update

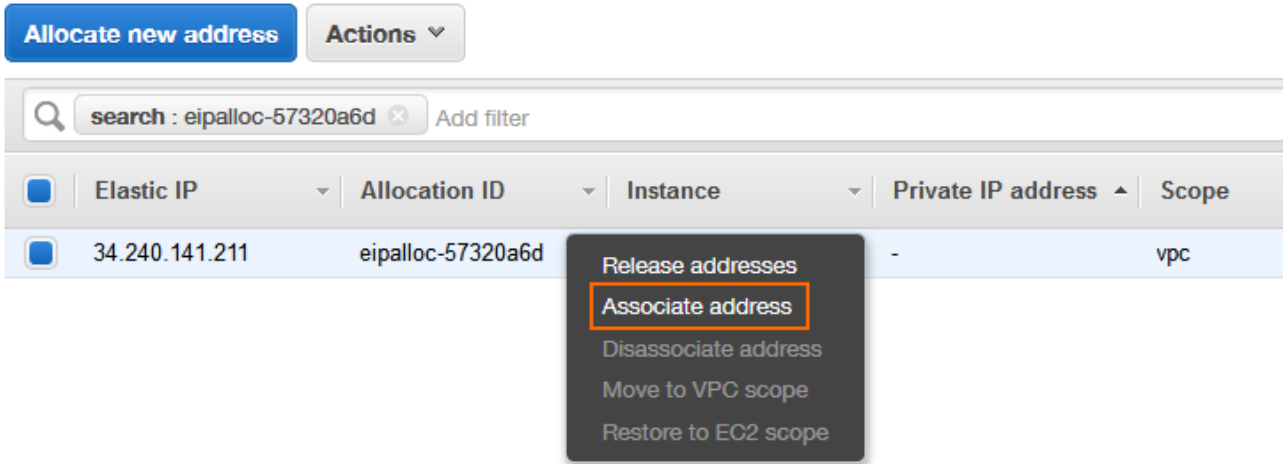
10. Click **Yes, Update**.

## Step 2. Create and Associate Elastic IP Addresses with the Private IPs

1. Log into the AWS console.
2. Click **Services** and select **EC2**.
3. In the **Network & Security** section of the left menu, click **Elastic IPs**.
4. Click **Allocate new address**.



5. Click **Allocate**.
6. Click **Close**.
7. Right-click the new elastic IP address and select **Associate**.



8. Select the instance and private IP address:
  - **Resource Type** - Select **Instance**.
  - **Instance** - Select the firewall instance from the list
  - **Private IP** - Select the secondary IP address added in Step1 from the list.
  - (optional) **Reassociation** - Select the check box if the Elastic IP Address is already associated with another instance.

## Associate address

Select the instance OR network interface to which you want to associate this Elastic IP address (34.240.141.211)

**Resource type**  Instance i  
 Network interface

**Instance**  ↻

**Private IP**  ↻ i

**Reassociation**  Allow Elastic IP to be reassociated if already attached i

9. Click **Associate**.

### Step 3. Add the Additional IP Address as Virtual Server IPs

Add the custom private IP addresses of both firewalls for the additional network interfaces to the virtual server IP addresses. If multiple IP addresses are used in a High Availability cluster, you must add both the private IP addresses from the primary and the secondary firewall as a virtual server IP address.

1. Log into the firewall
2. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > S1 > Server**

**Properties.**

3. Click **Lock**.
4. In the **Additional IP** table, click **+** to add the additional private IP addresses.

Additional IP



Additional IP	Label	Reply to Ping	Descrip
10.100.0.15		1	

5. Click **Send Changes** and **Activate**.

The firewall instance is now reachable through multiple public IP addresses.

**Next Steps**

Adapt access rules to use the additional private IP addresses.

## Figures

1. aws\_multiple\_IPs\_01.png
2. aws\_multiple\_IPs\_02.png
3. aws\_multiple\_IPs\_03.png
4. aws\_multiple\_IPs\_04.png
5. aws\_multiple\_IPs\_05.png
6. aws\_multiple\_IPs\_07.png
7. aws\_multiple\_IPs\_08.png
8. aws\_multiple\_IPs\_09.png

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