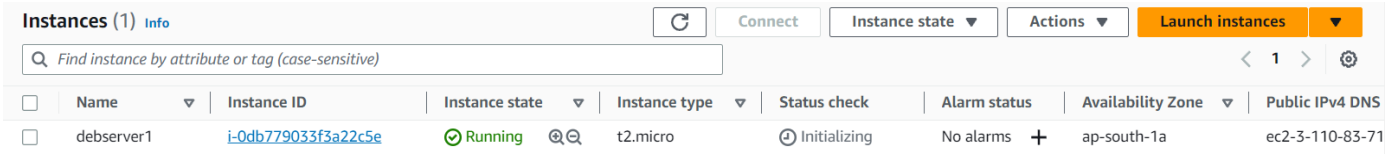
Assignment 14

Problem Statement: Create an elastic IP for an instance.

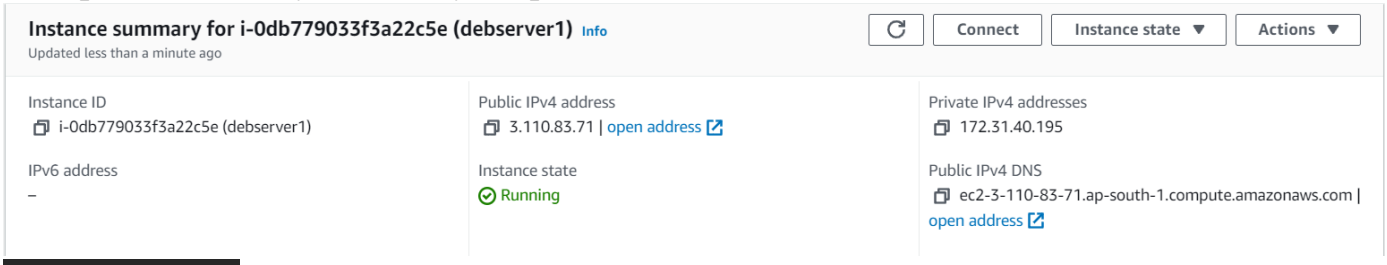
Procedure:

1. Sign-in to your AWS console.

2. Create an EC2 instance. (We do not need any user-data or any custom security group for this assignment).



3. After the instance gets created click on it. Copy the public IPv4 address and paste it in a simple text file anywhere in your pc.

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3.110.83.71
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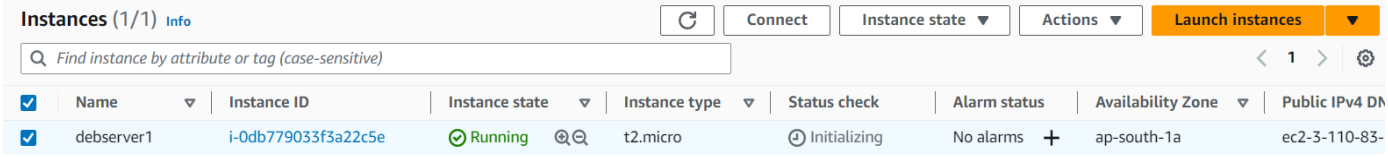
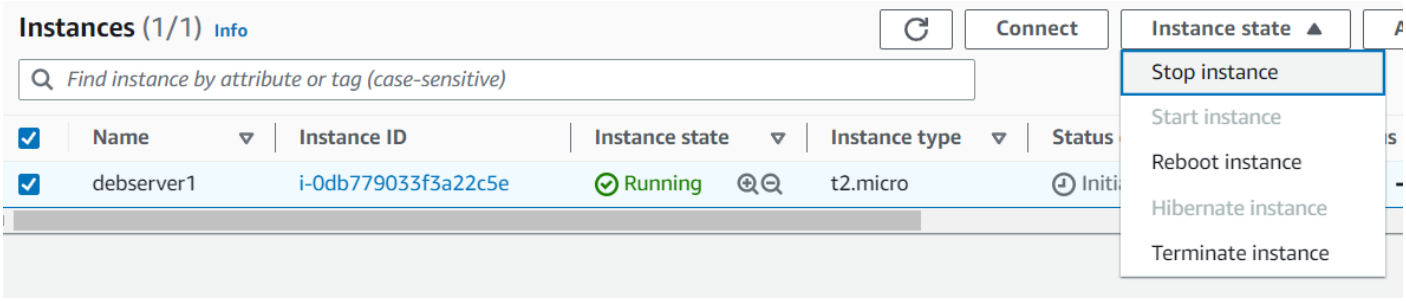
4. Now go back to the instances list and select our instance.

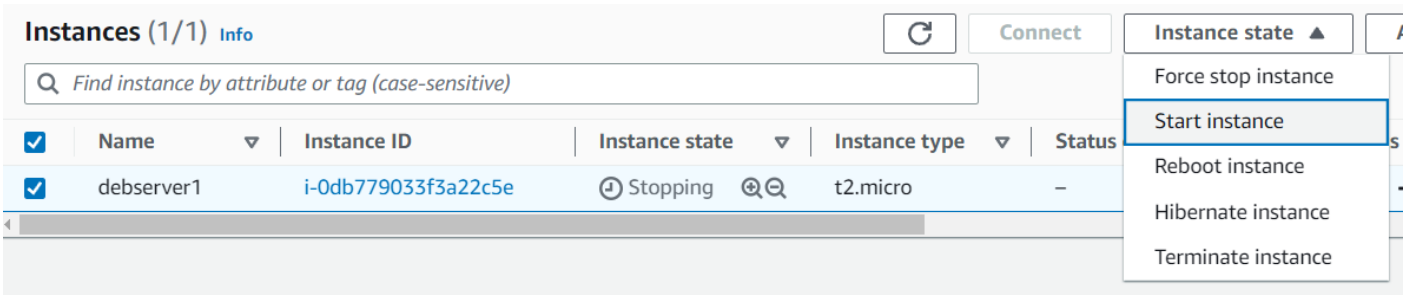


5. After selection click on the Instance state button and click on the Stop Instance option.

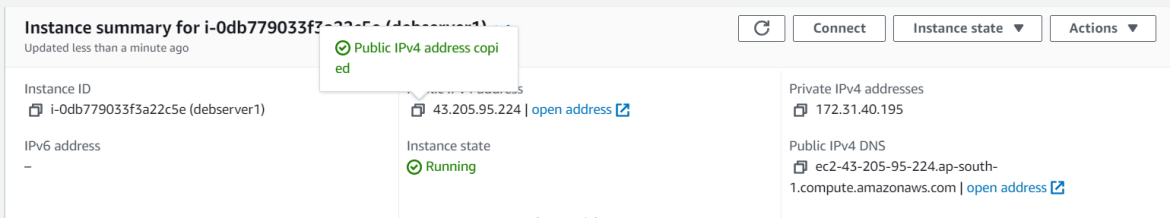


6. Wait for few seconds.

7. Now again select the instance and click on the Instance state button. Now click on the start instance button.



8. Click on the instance and copy the IPv4 address again and paste it in the same text file.



9. Now compare both the new and old IP address and notice that they are not the same.

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3.110.83.71
43.205.95.224
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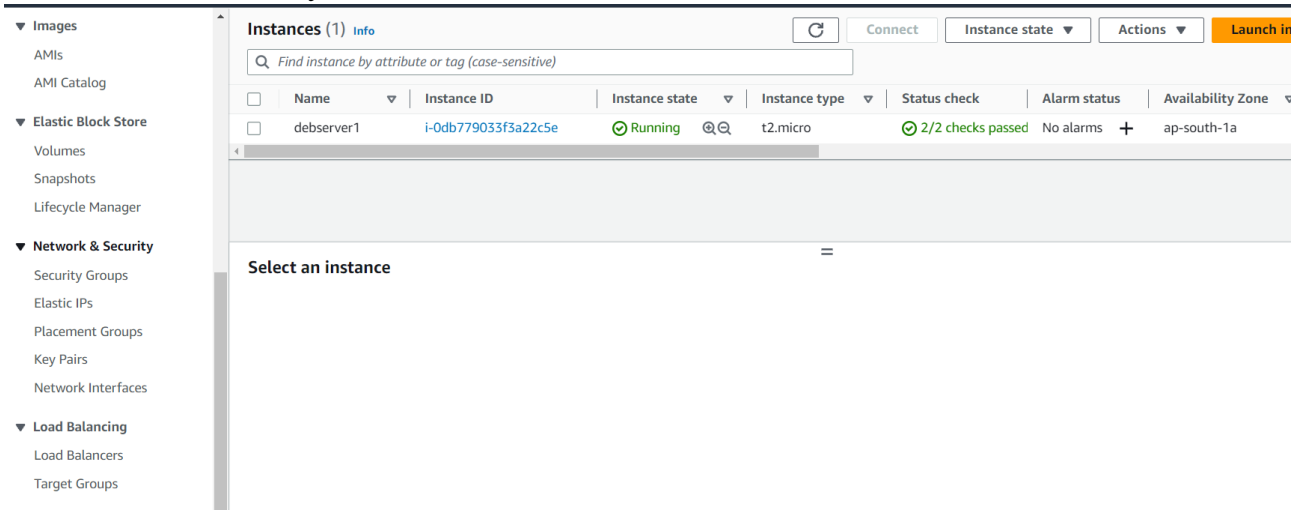
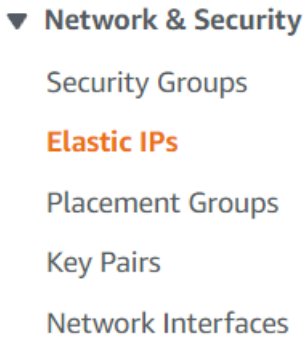
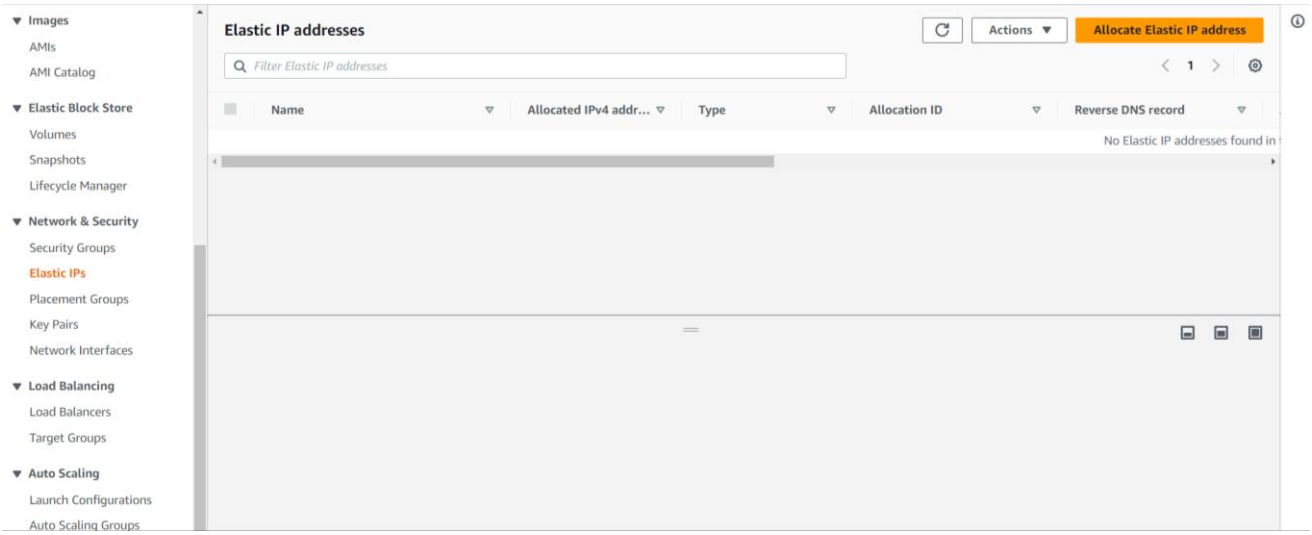
So even if we stop and restart our same instance it changes it public IPv4 address. This may not be desirable in some situations. So, to ensure that our instance does not change its public IPv4 address under any circumstances, we need to create an Elastic IP and associate/bind the instance to it. After that it will always be assigned the same Elastic IP as its public IPv4 address (static) all the time.

10. For creating an Elastic IP, we need to go scroll down the left side Nav bar and find the Network and security section.

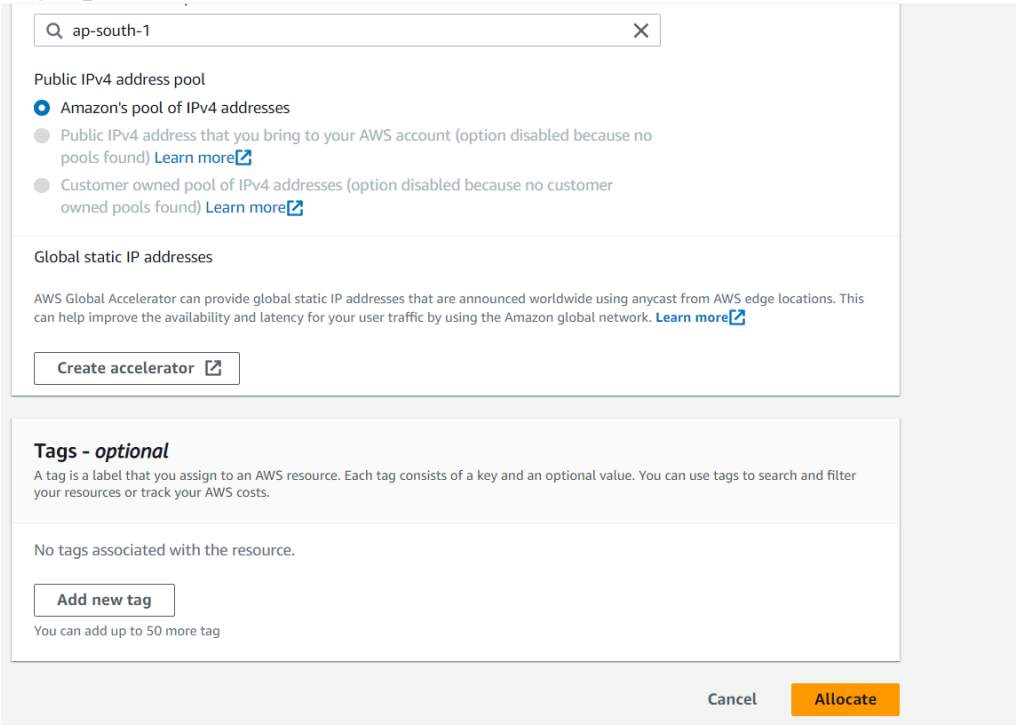


11. Under it click on the Elastic IPs option.

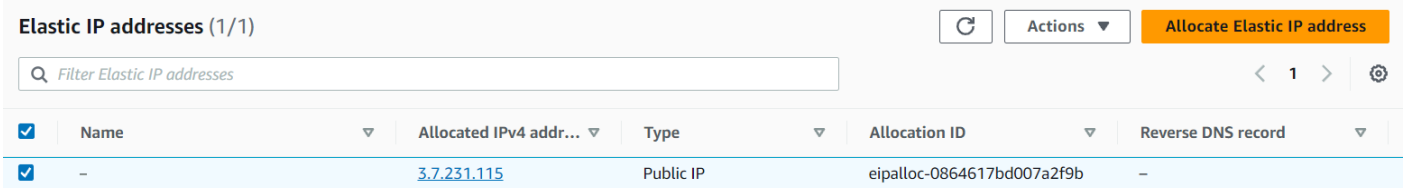




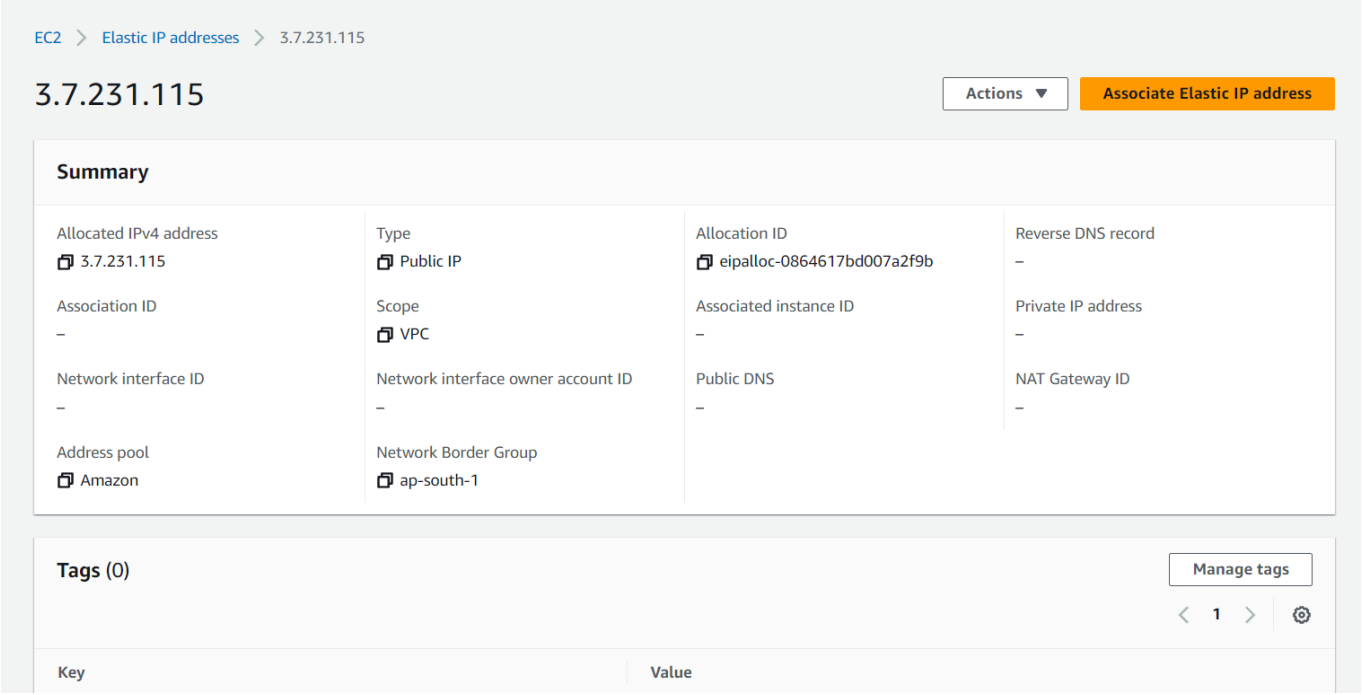
12. Now, click on the Allocate Elastic IP address button on the right side. No need to change any options. Just click on the Allocate button.



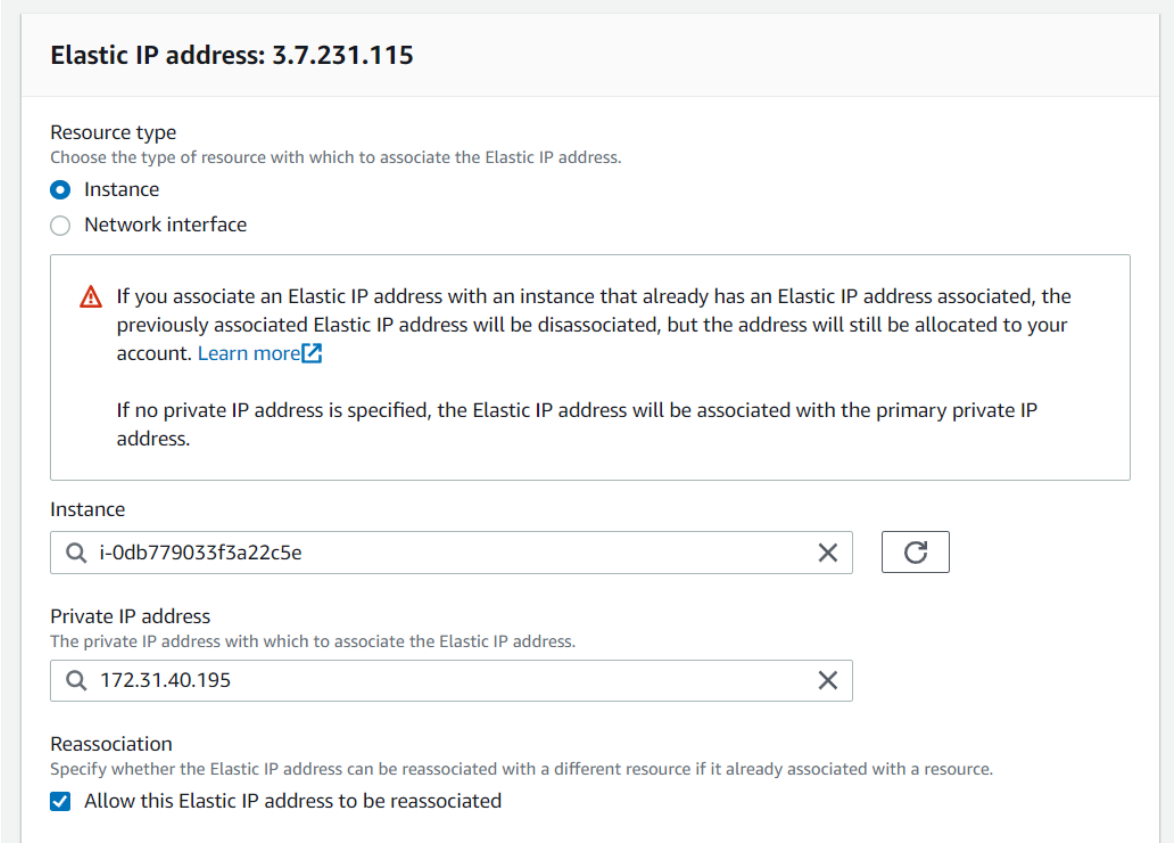
13. Now click on the Elastic IP address (in blue).



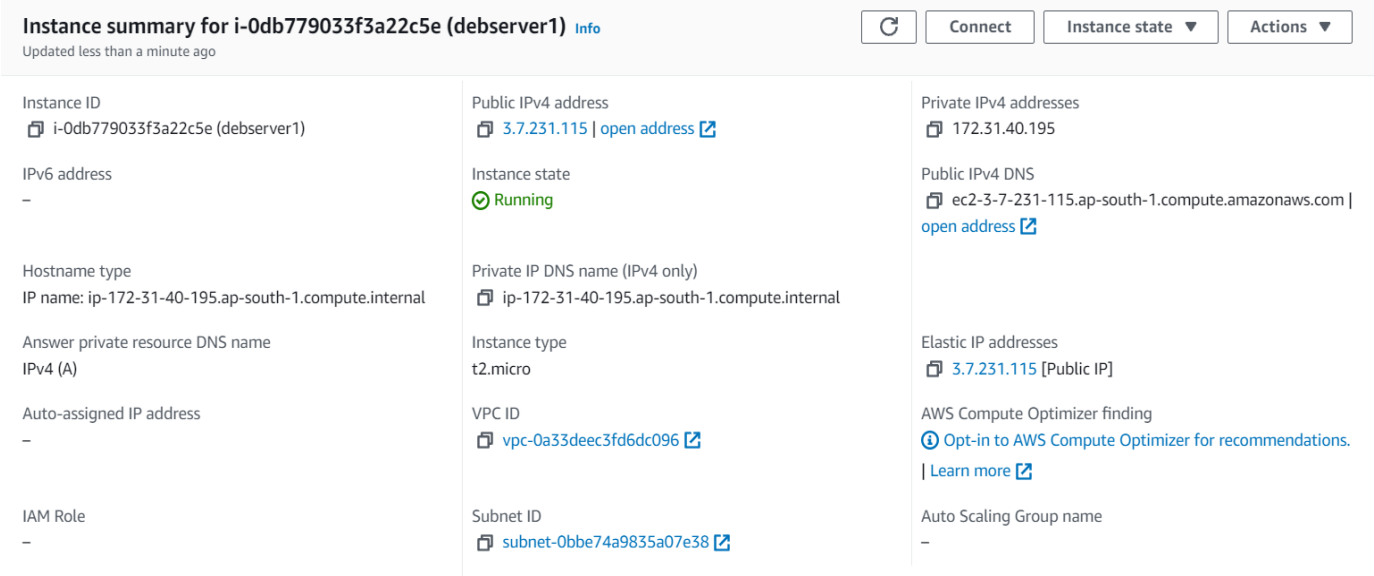
14. Next click on the Associate Elastic IP address button.



15. Choose your instance you want to associate with it.
16. Keep the Private IP address as specified in the dropdown when clicking for the Private Address.
17. Select the Allow Elastic IP to be reassociated option if we want to reuse it again for another instance.



18. Now click the associate button.
19. The Elastic IP should have been successfully associated with the instance.
20. To check it go back to the instances page. Click on the Instance and see the Public IPv4 address and the Elastic IP address. They should be same. Also notice that the public IPv4 address has turned into a hyperlink to the Elastic IP page.

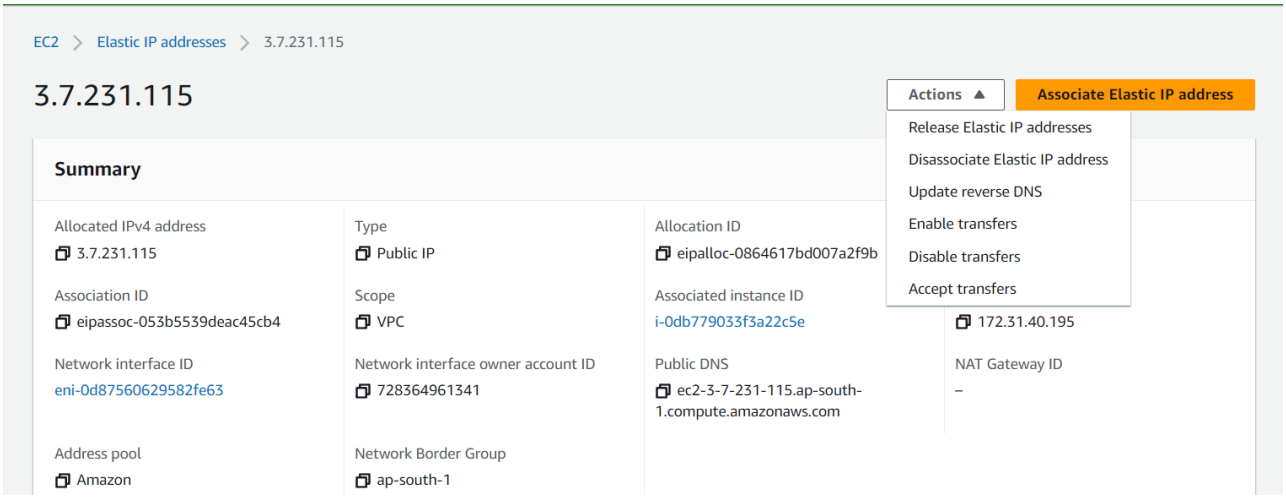


Now stop and restart the instance and see if the public IPv4 address changes or not. It will not change.

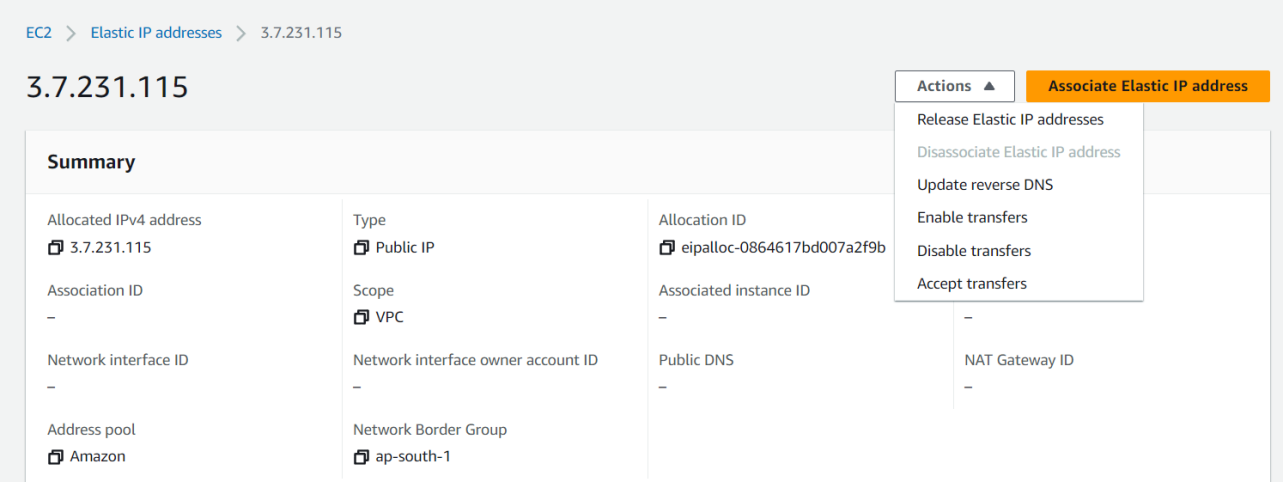
Hence, we have successfully created an Elastic IP for an instance.

To delete the Elastic IP, follow these steps:

1. Click on the Elastic IP.
2. Click on the actions button.



3. From the drop-down menu select Disassociate Elastic IP address. Then again click on disassociate on the pop-up.
4. Next again click on the Actions button and this time select Release Elastic IP address.



5. Now you can go back to your instance and see that the IPv4 address has already changed to a random one and it has no Elastic IP address associated with it. Now you can terminate the instance.