**Day 31**



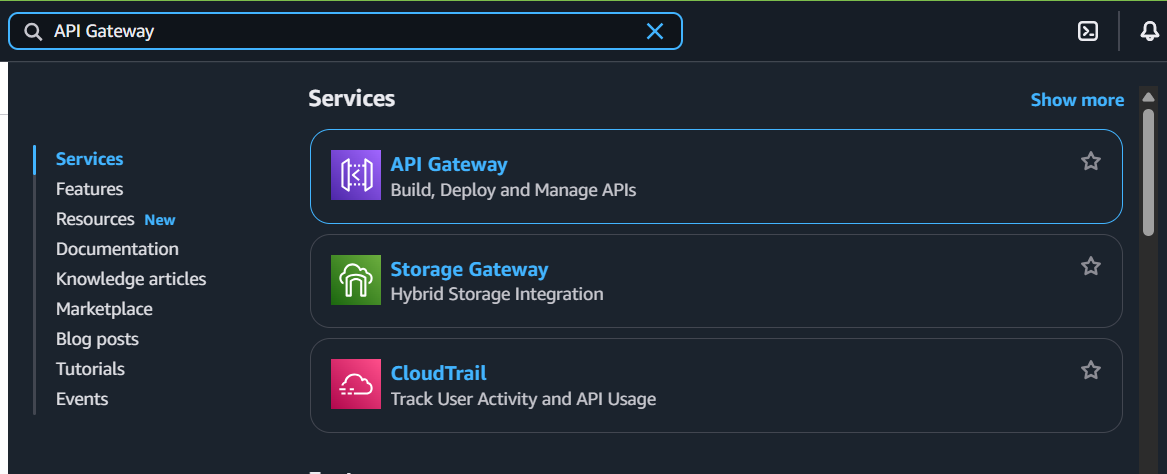


**“CLOUD SECURITY”**

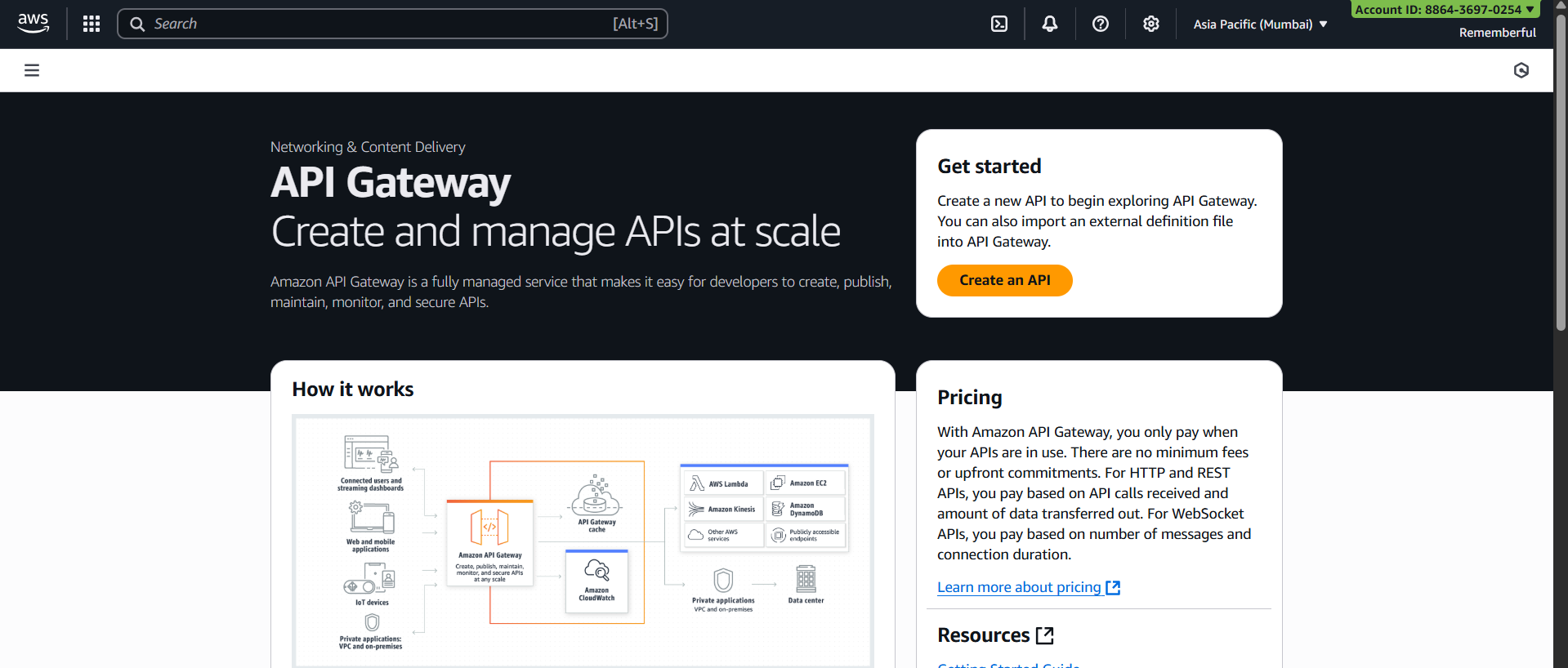
**Implementing web application firewalls in AWS:**

Steps:

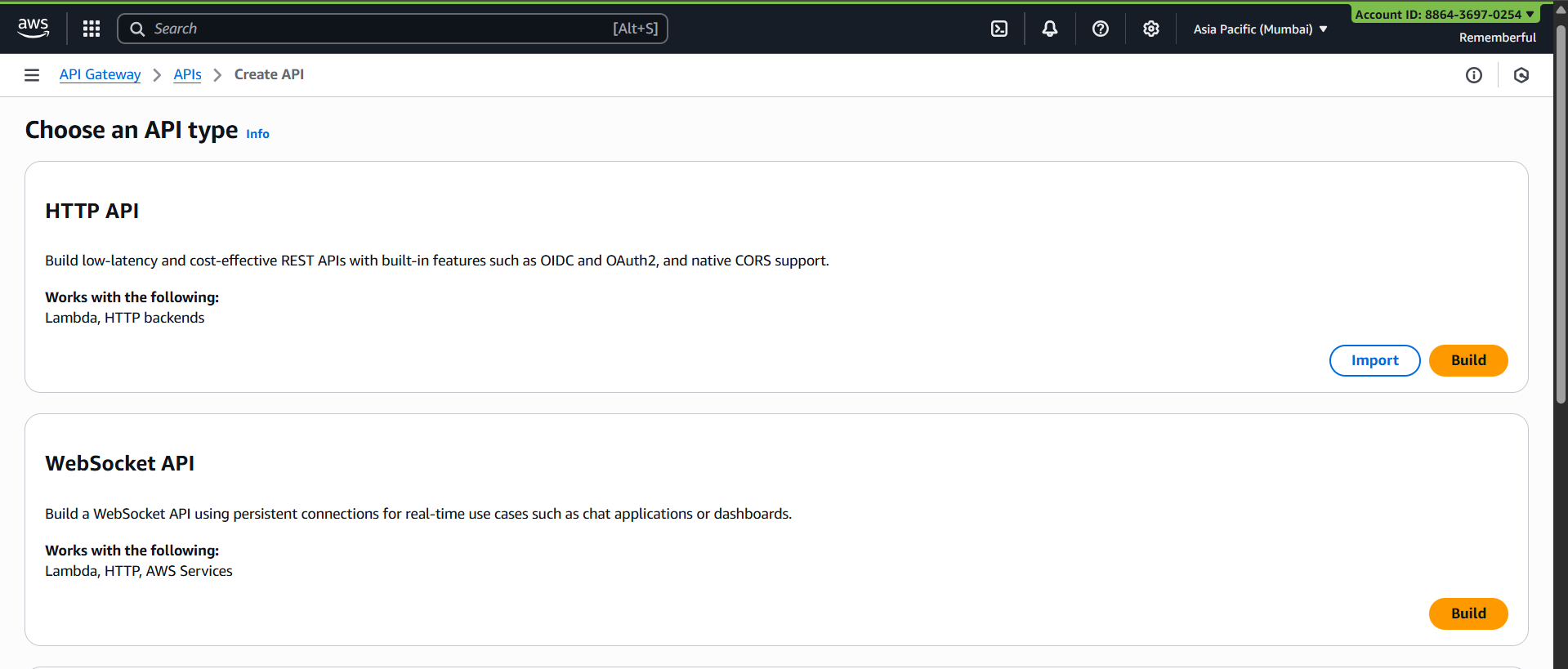
First, we will create a web API in AWS, for which we need to go to API Gateway:

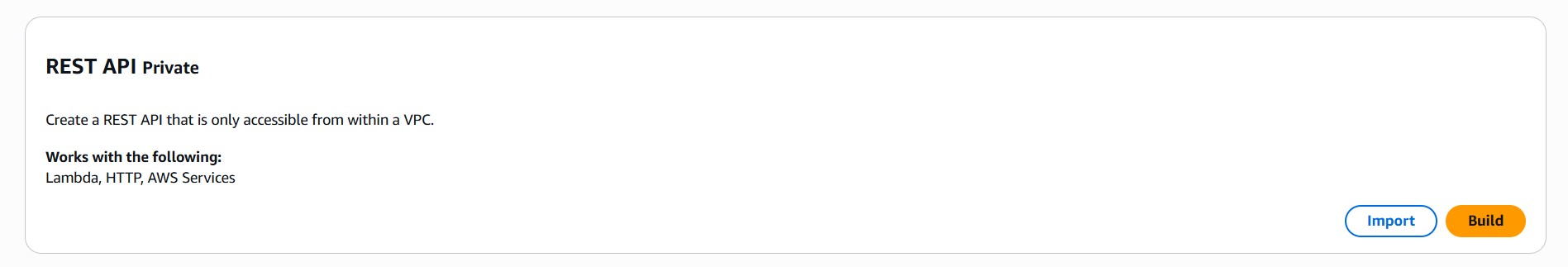


Following window will appear:

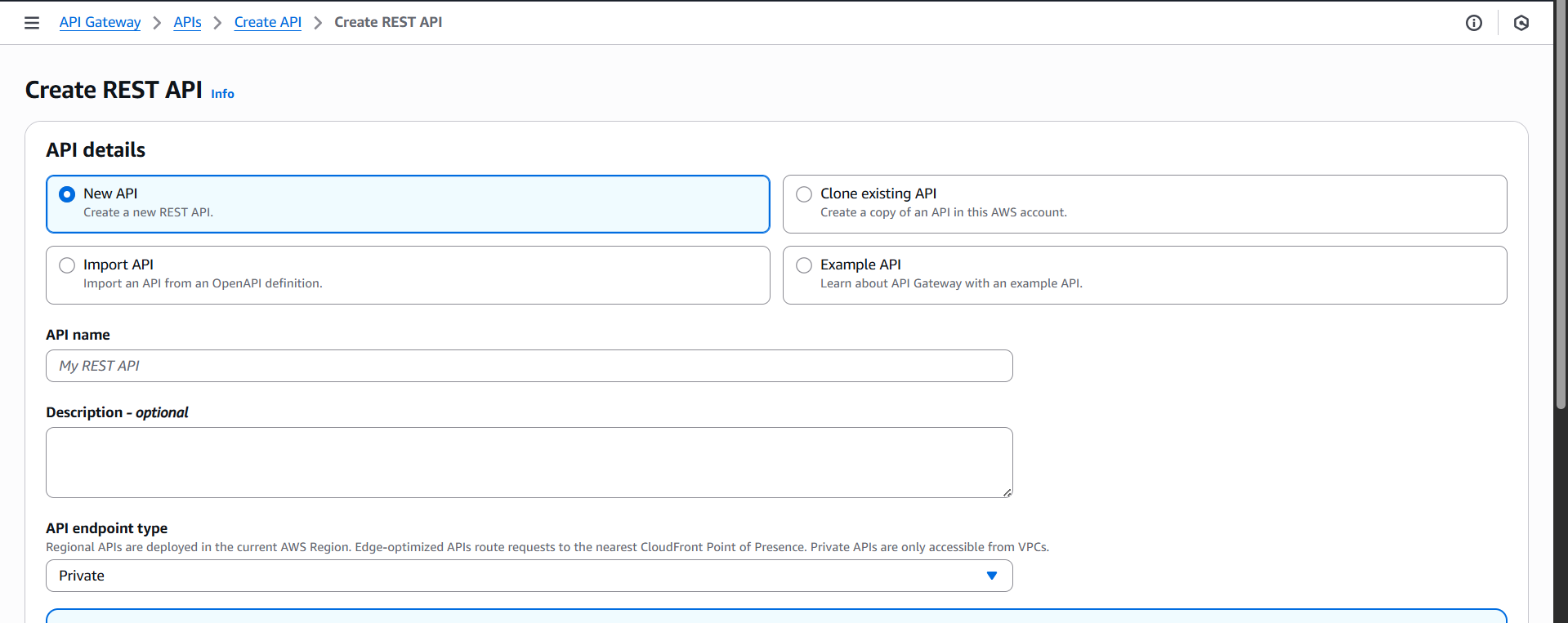


Click on the “Create an API” button: following window will appear.

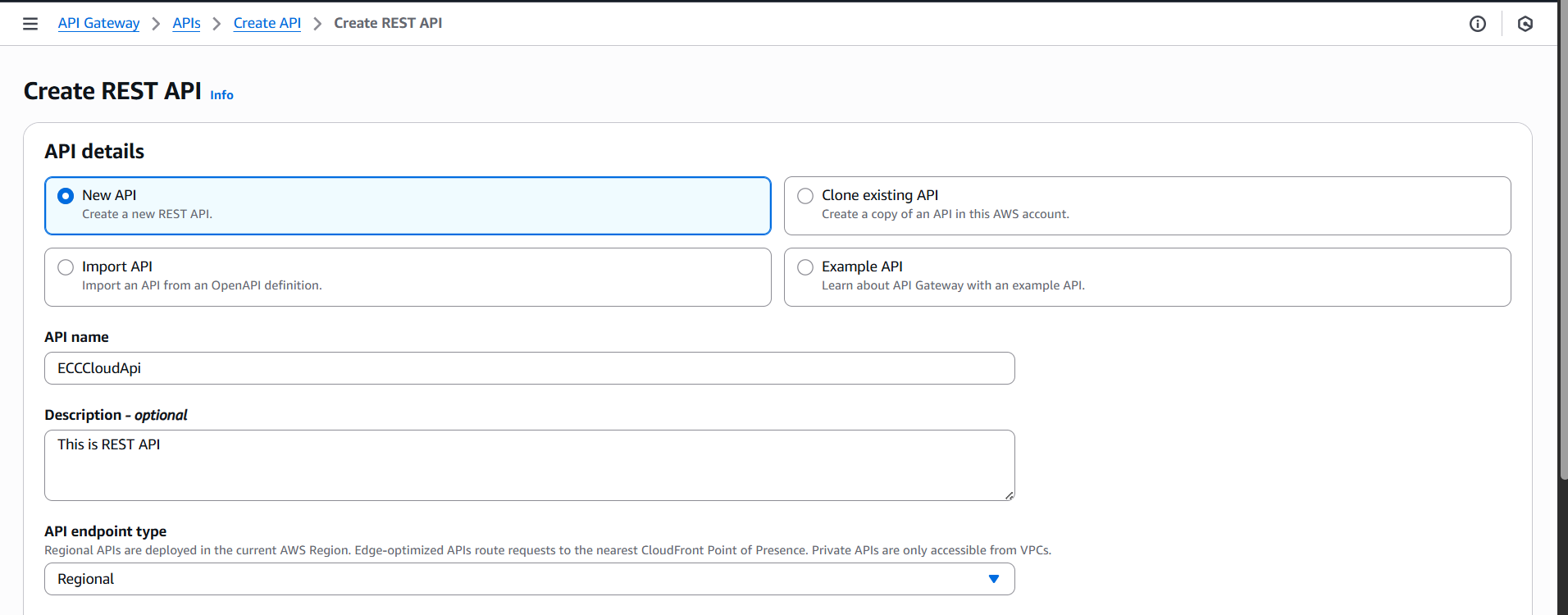


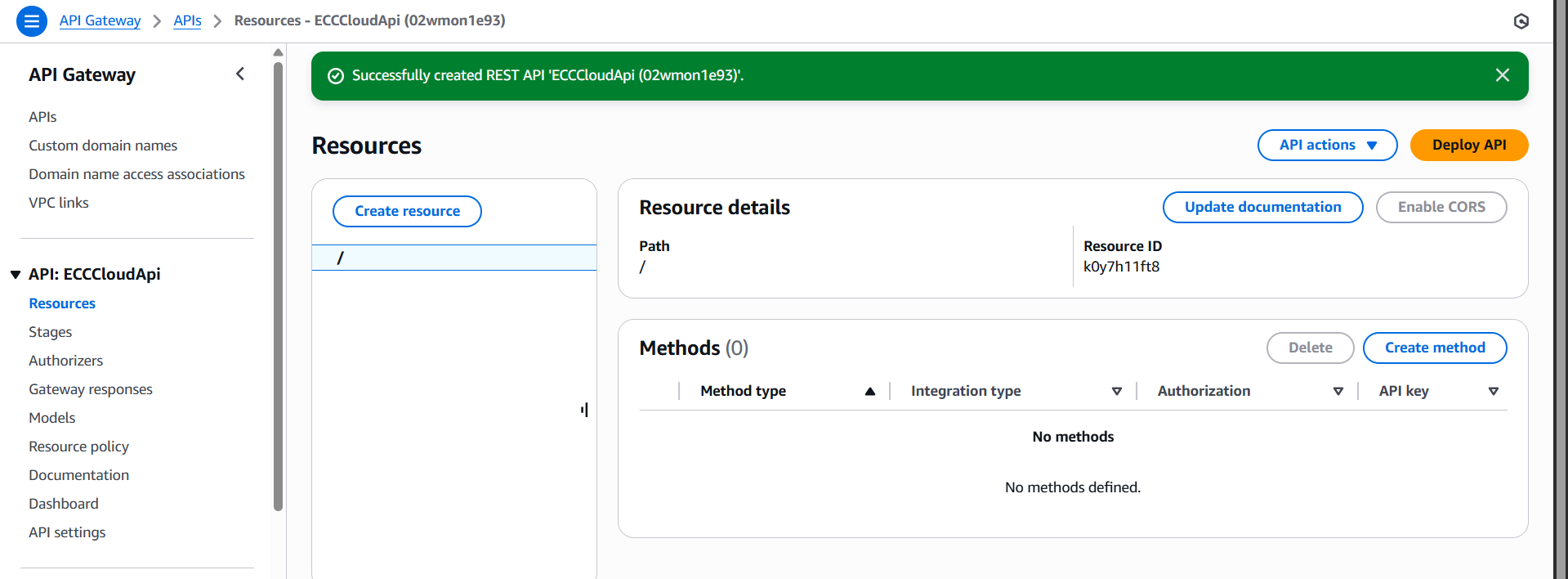
We will create a REST API Private, so scroll down and click on the “Build” button at the REST API private section: 

Following window will appear:

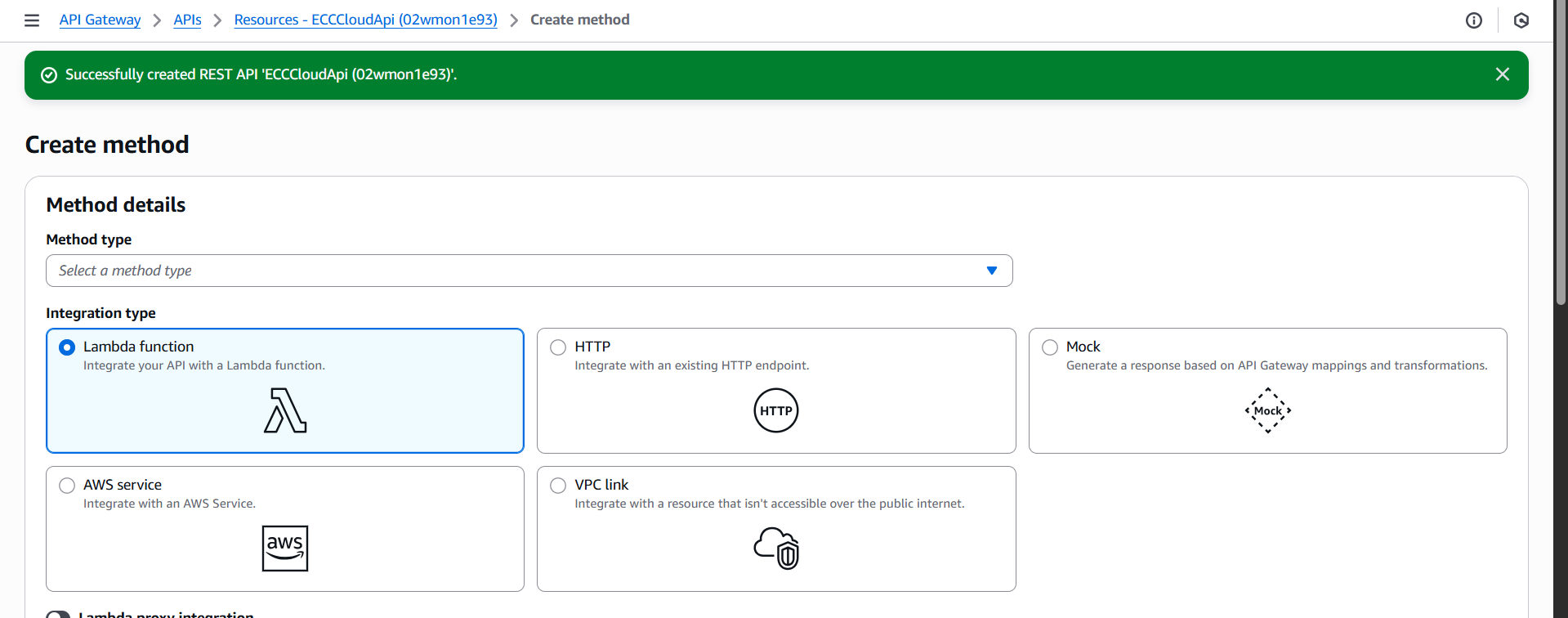


Make changes, as shown or as per the requirement:

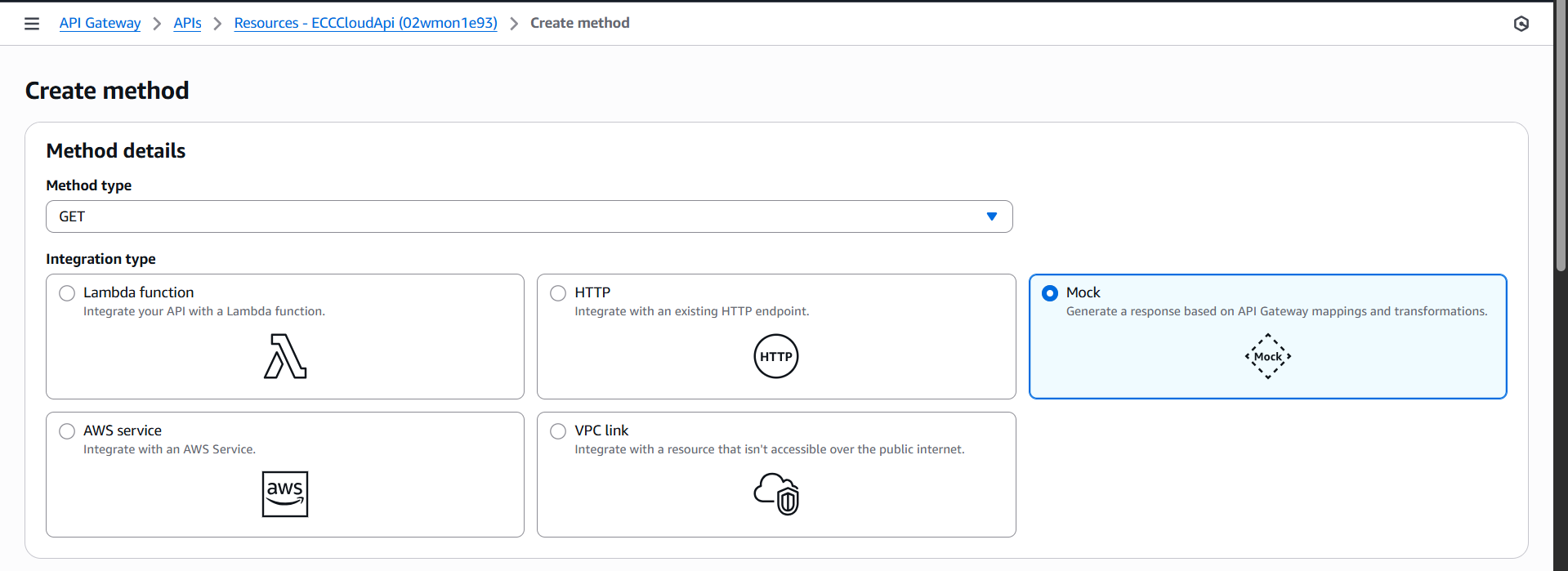


Following confirmation will occur:  


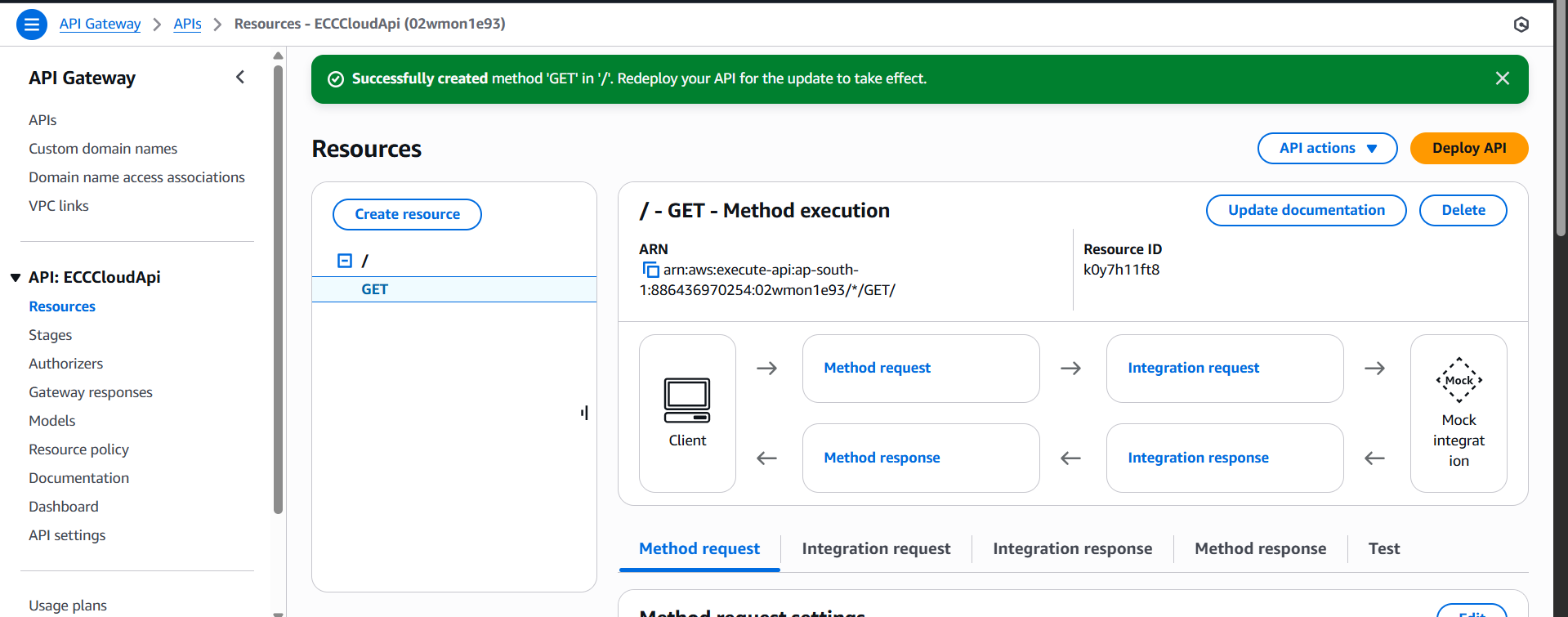
Click on the “Create Method” button as shown above:



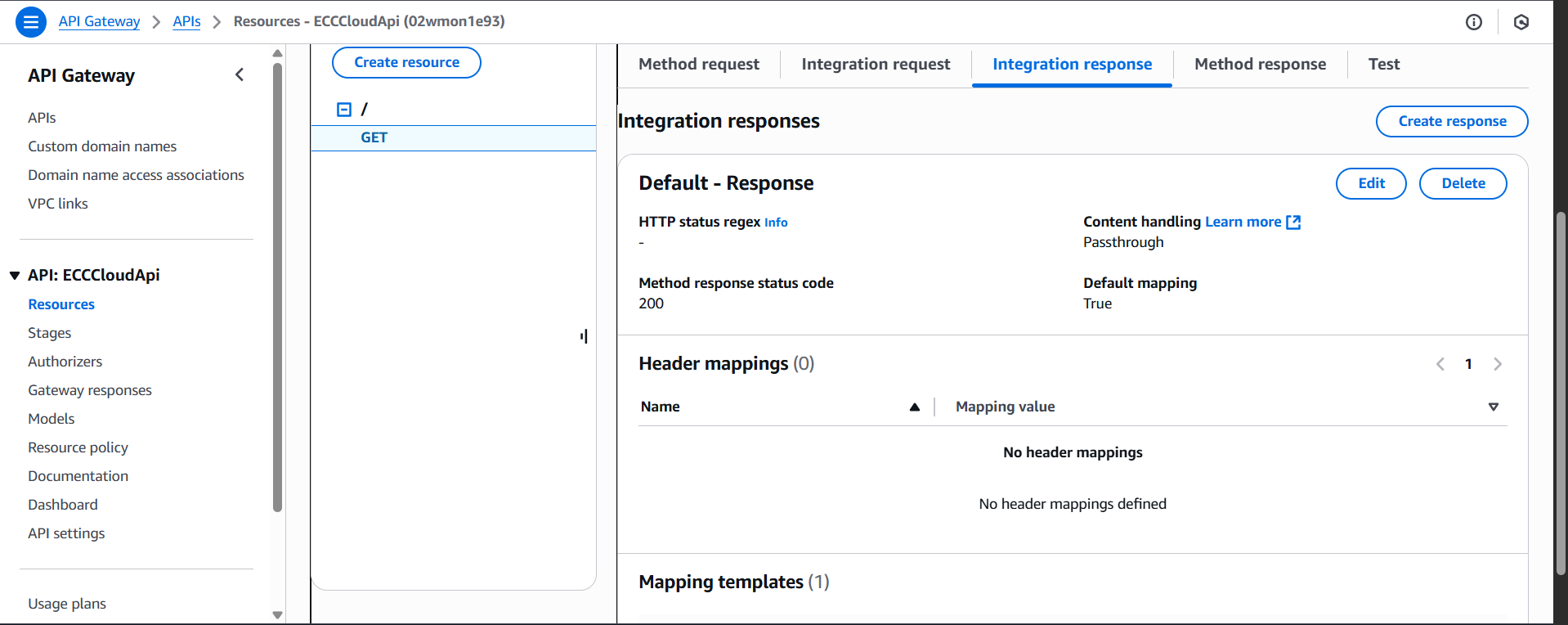
Change the options as shown below:



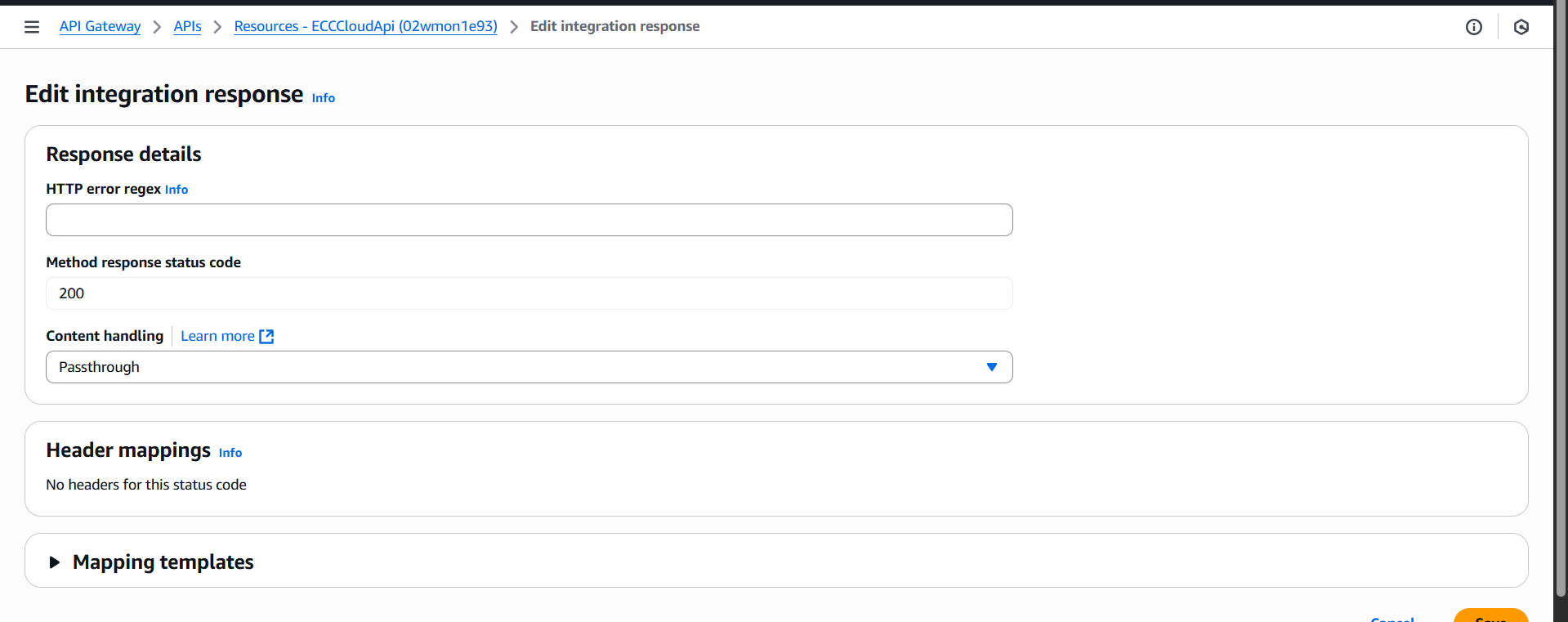
After this, click on the orange button given below, following confirmation will occur:



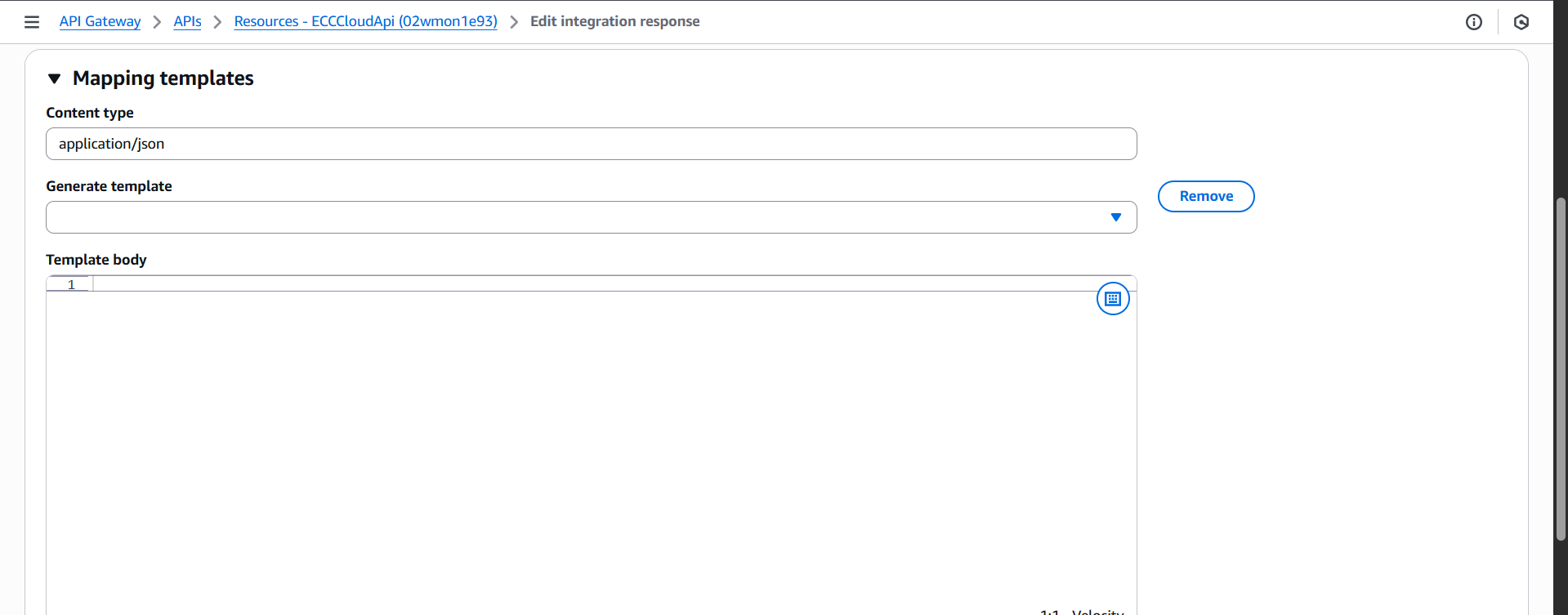
Now, click on the “integration responses” section: following option should occur.



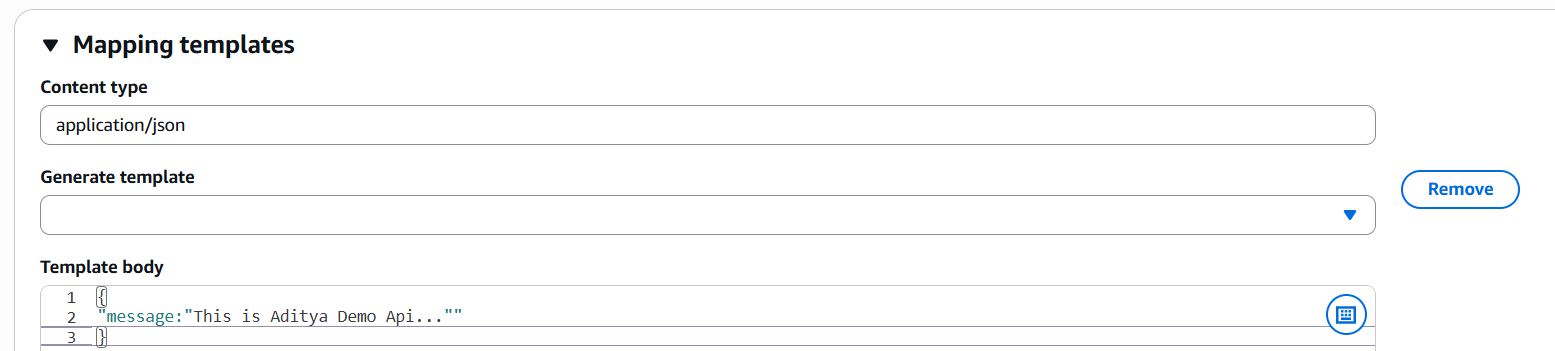
Click on the “edit” button: following window will appears.



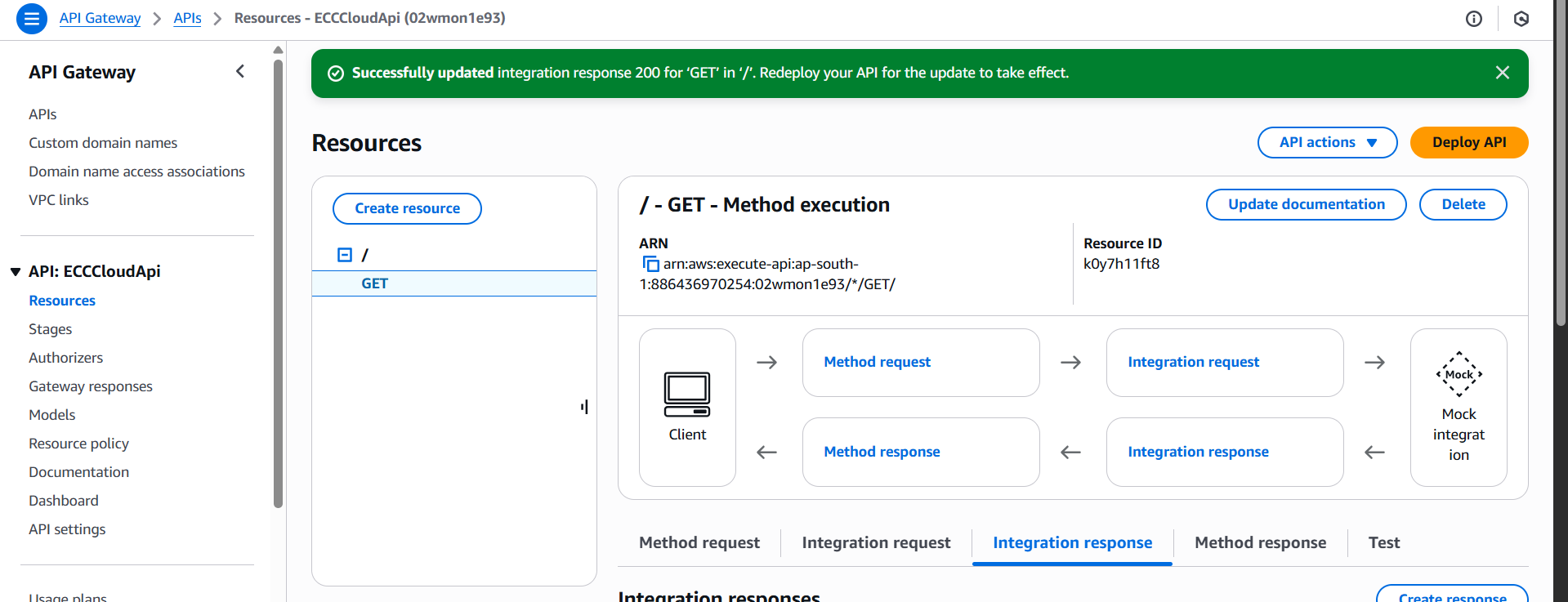
Click on the “Mapping Templates” option:



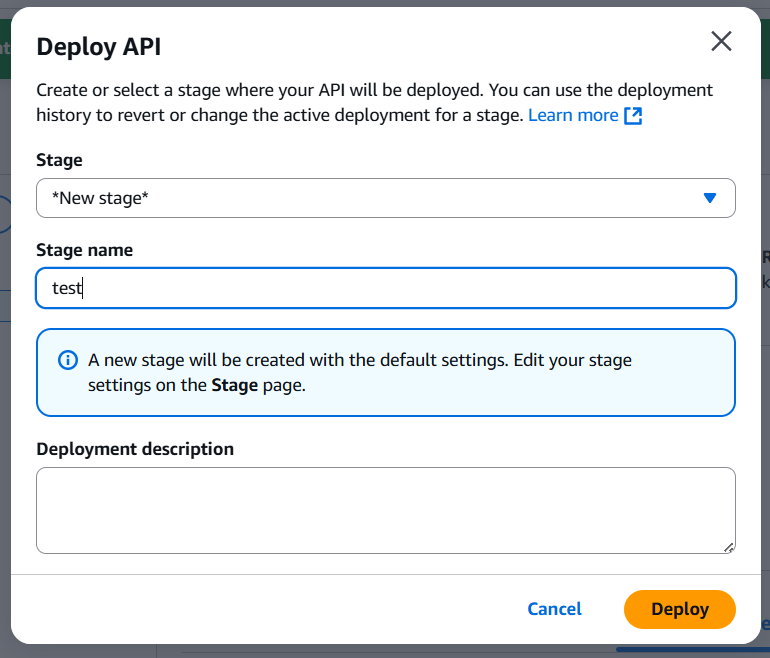
Type the following as shown:



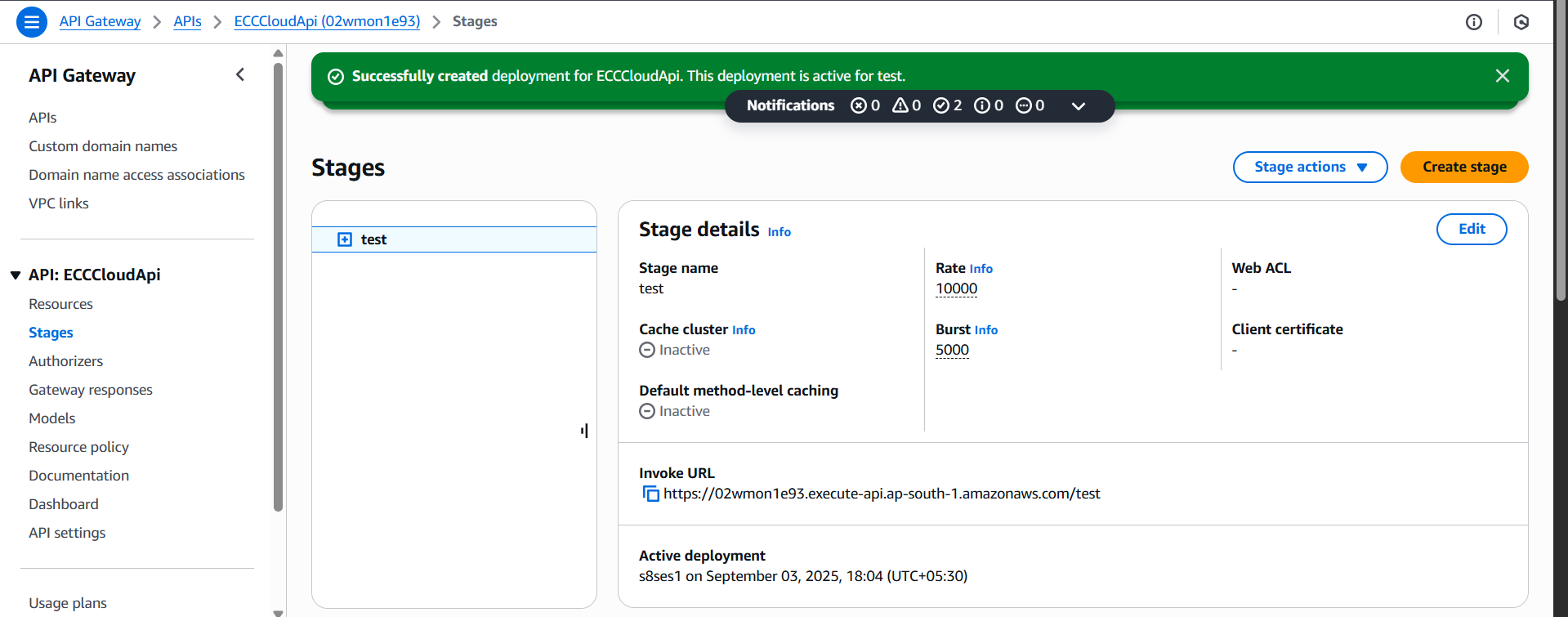
Following confirmation will occur:



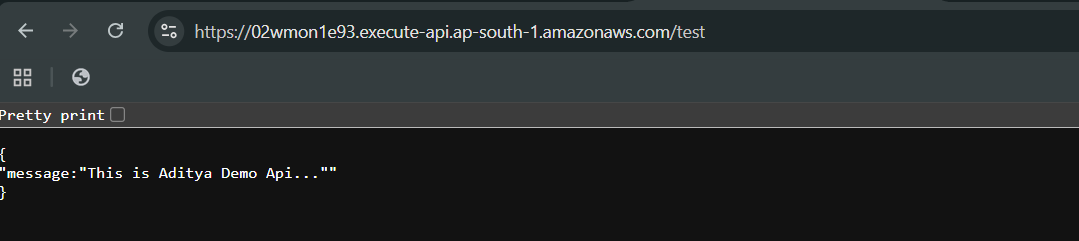
Click on the “Deploy API” button, and then select the stage as “New Stage”: then click on deploy



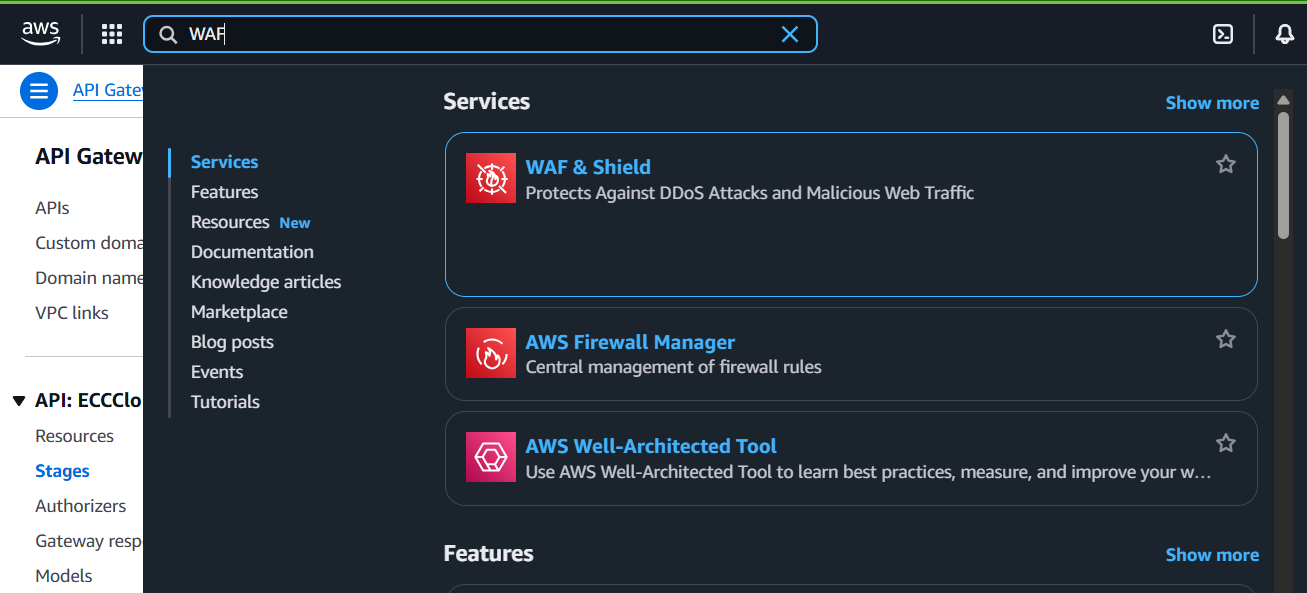
Following confirmation will occur:



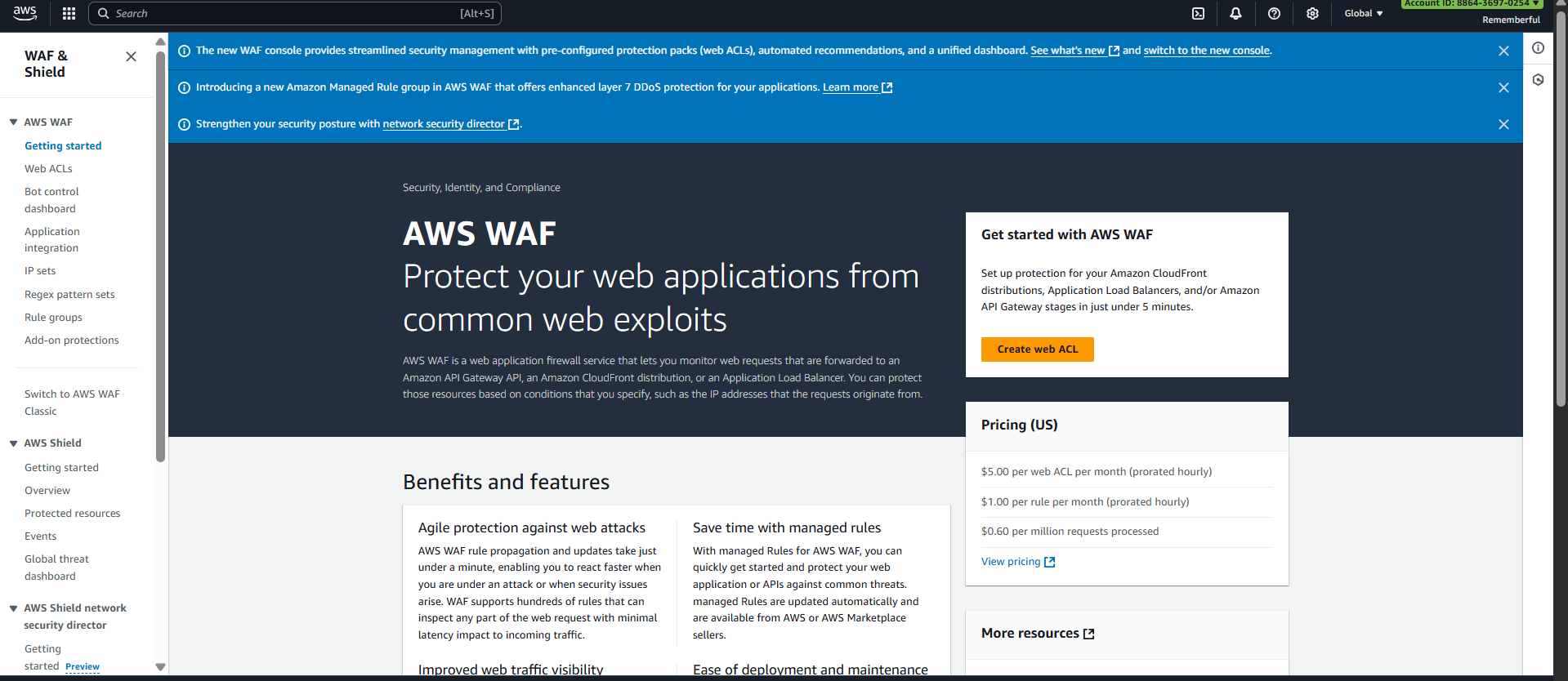
Now, paste the invoke URL which is shown there in new tab: it will show something like this.



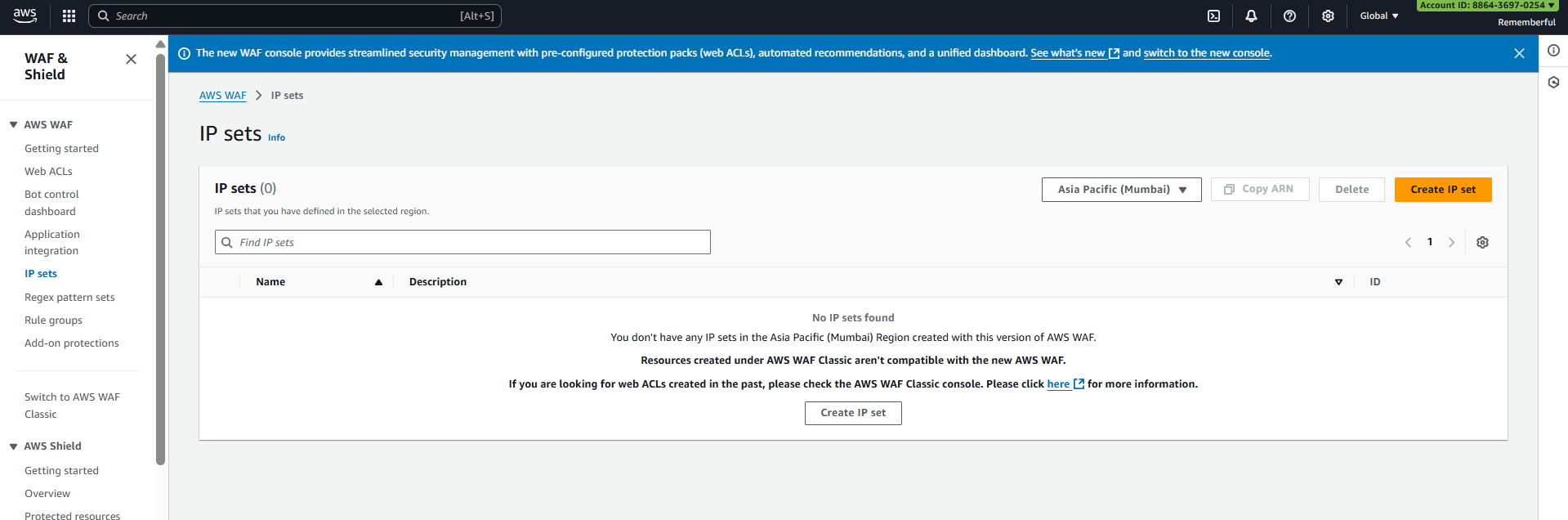
So, API is ready, now we will be protecting this API from the specified IP with WAF:



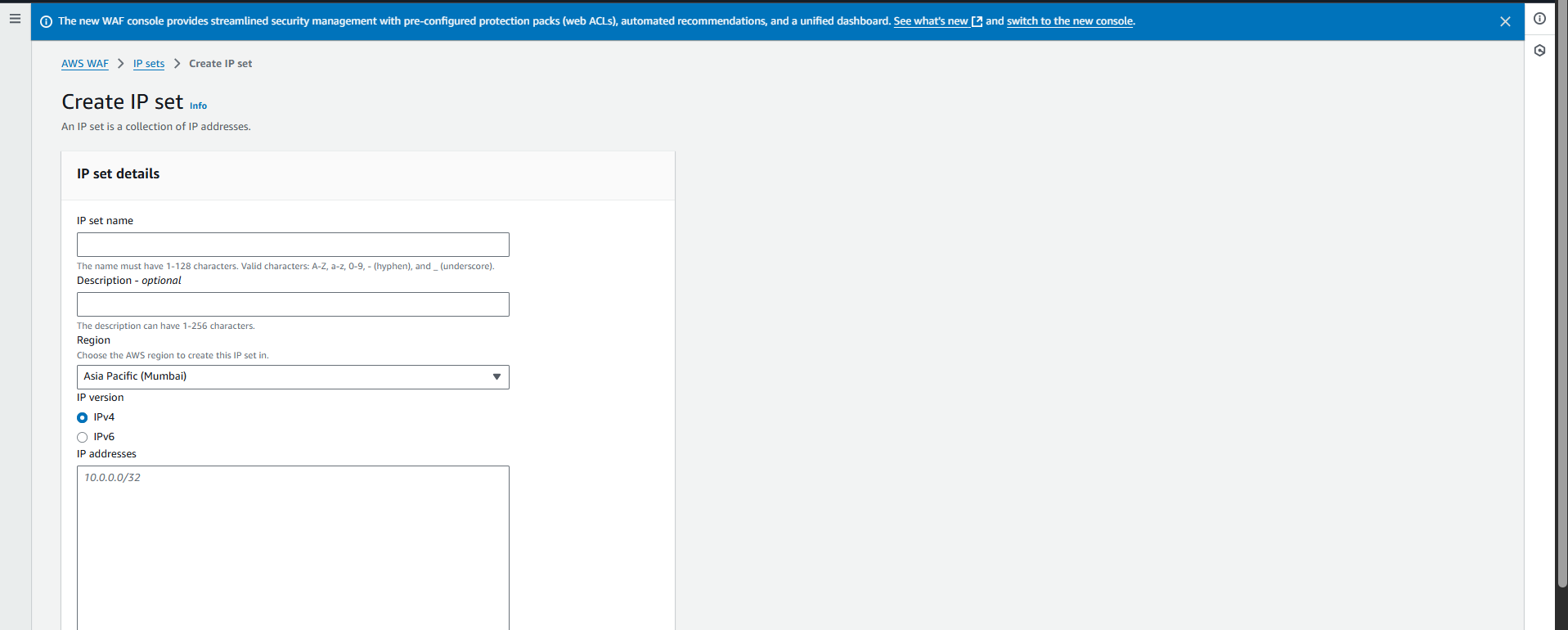
Following window will appear:



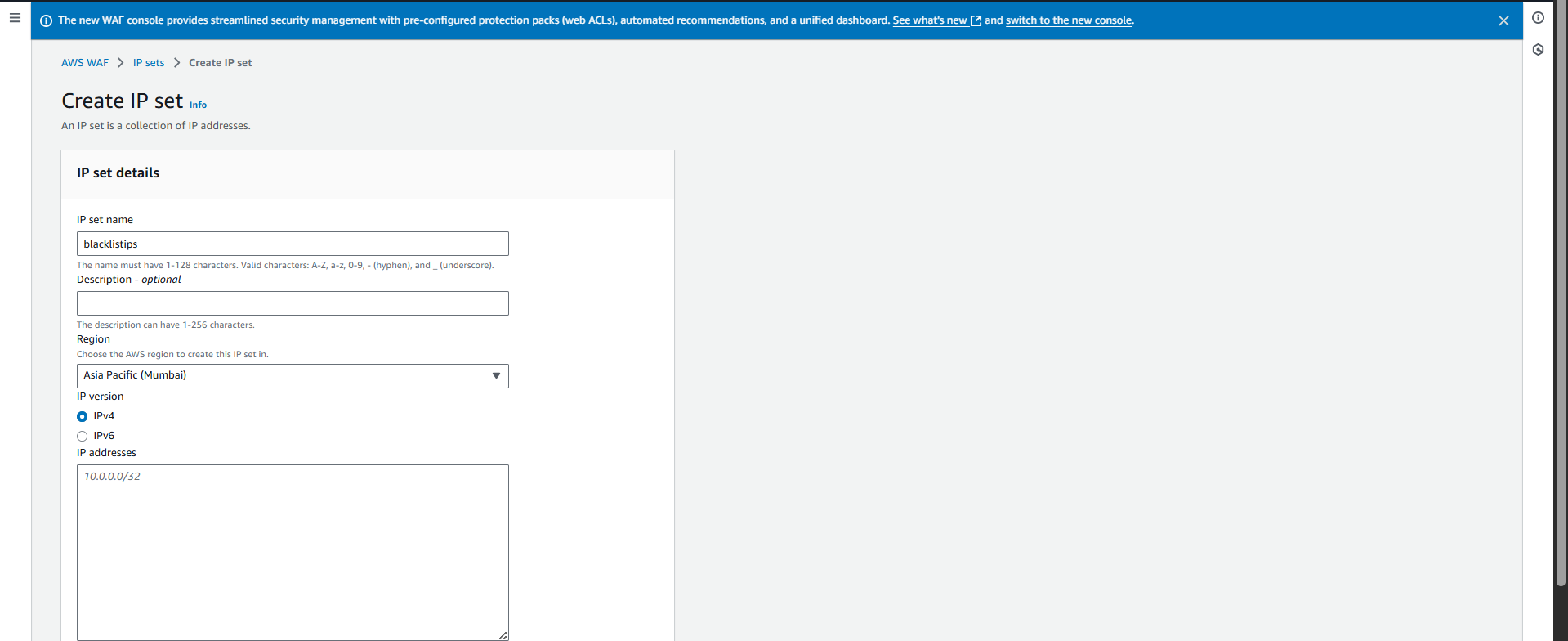
Click on the “IP sets” from the left pane:



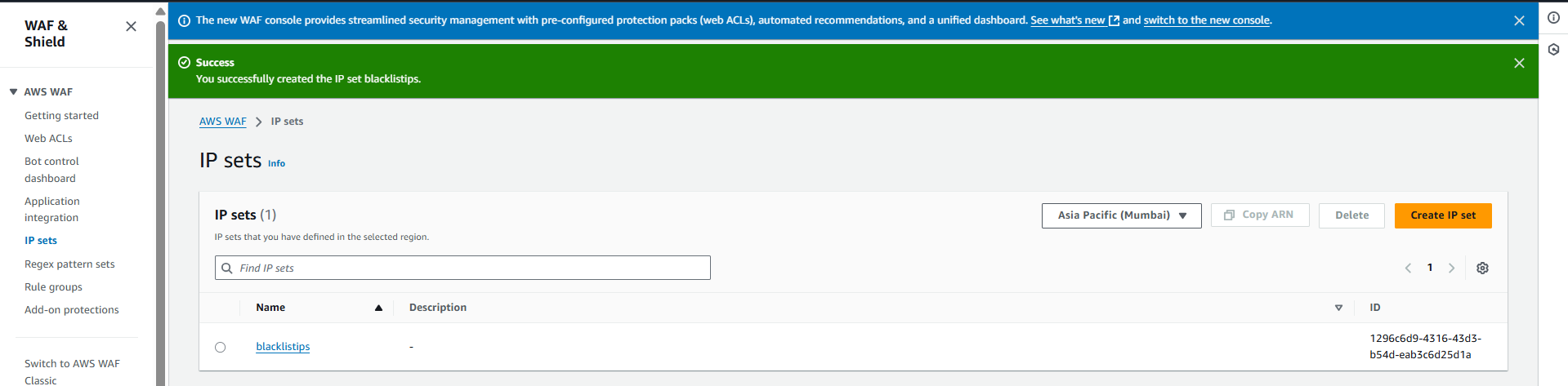
Click on the “Create IP Set” button: following page occurs.



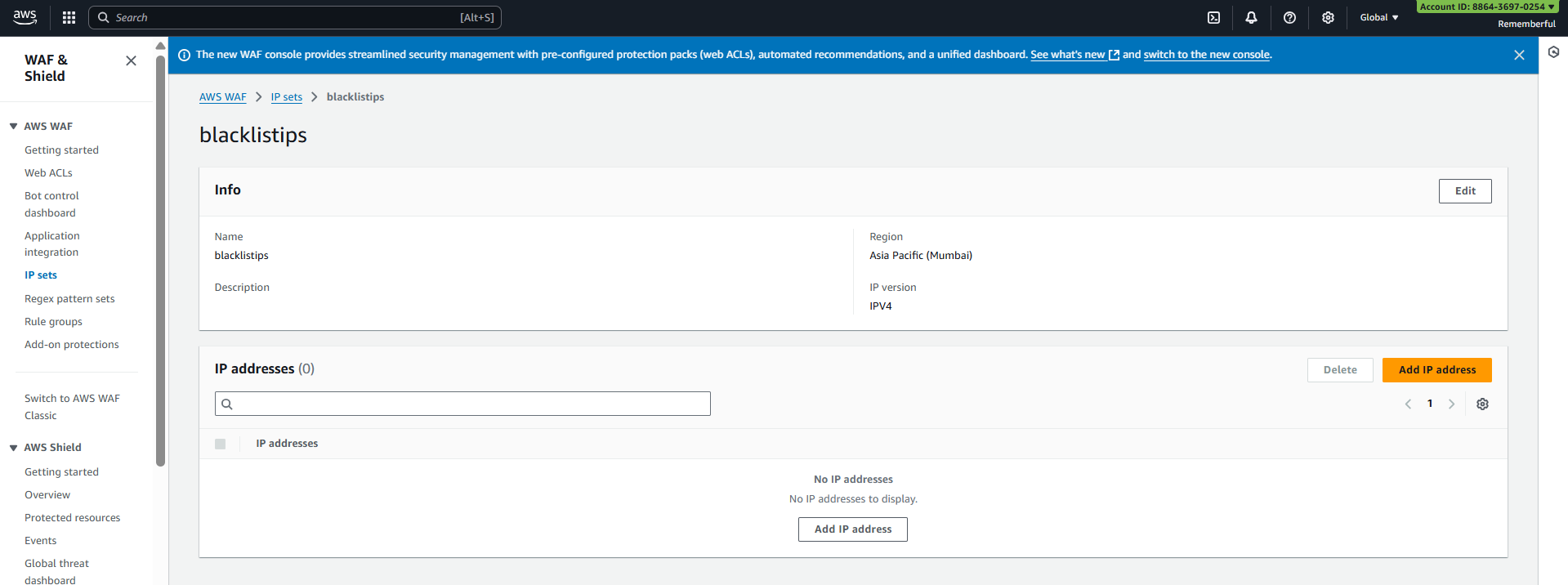
Specify the name of your choice:



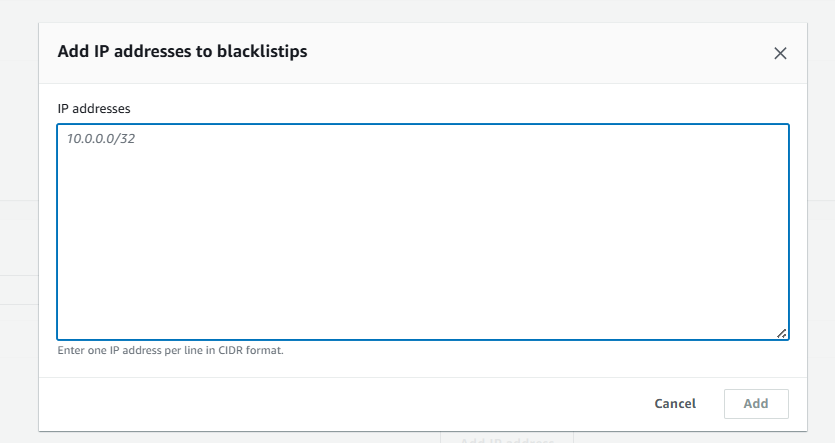
Following confirmation will occur:



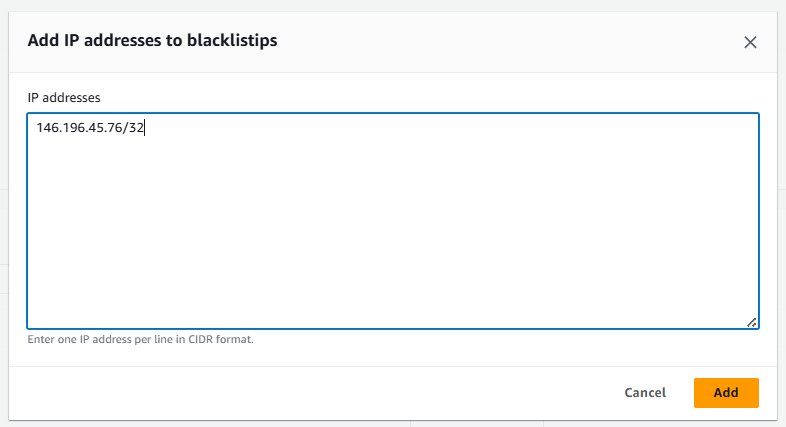
Click on the name of it:



Now, click on the “Add IP address” button:

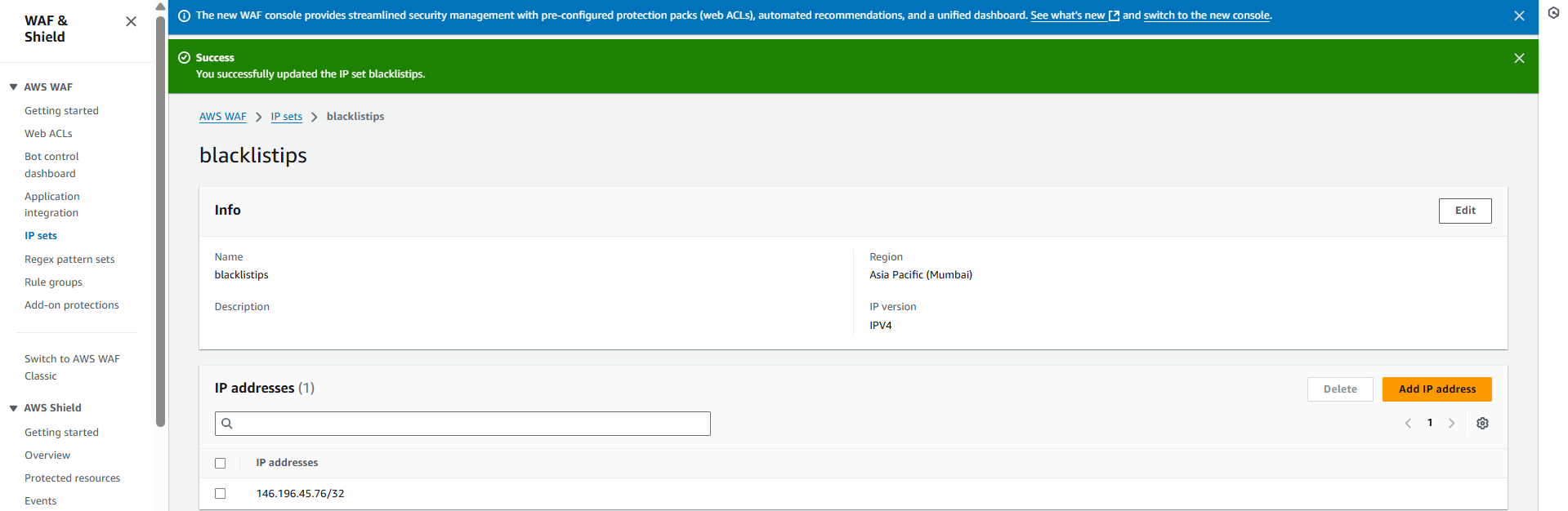


Specify the IP: here I did my own public IP.

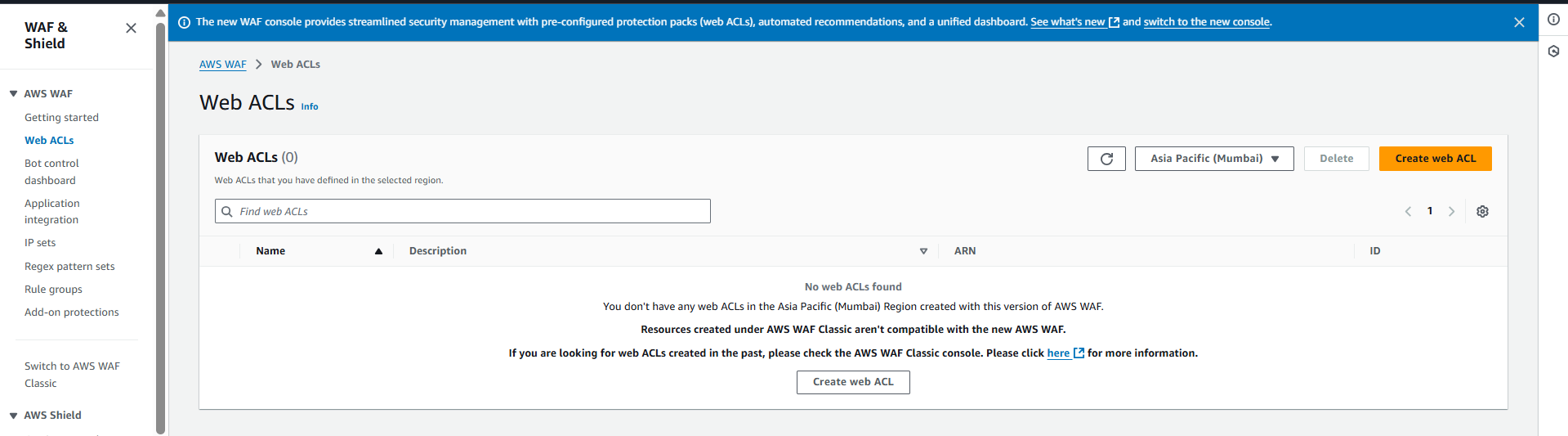




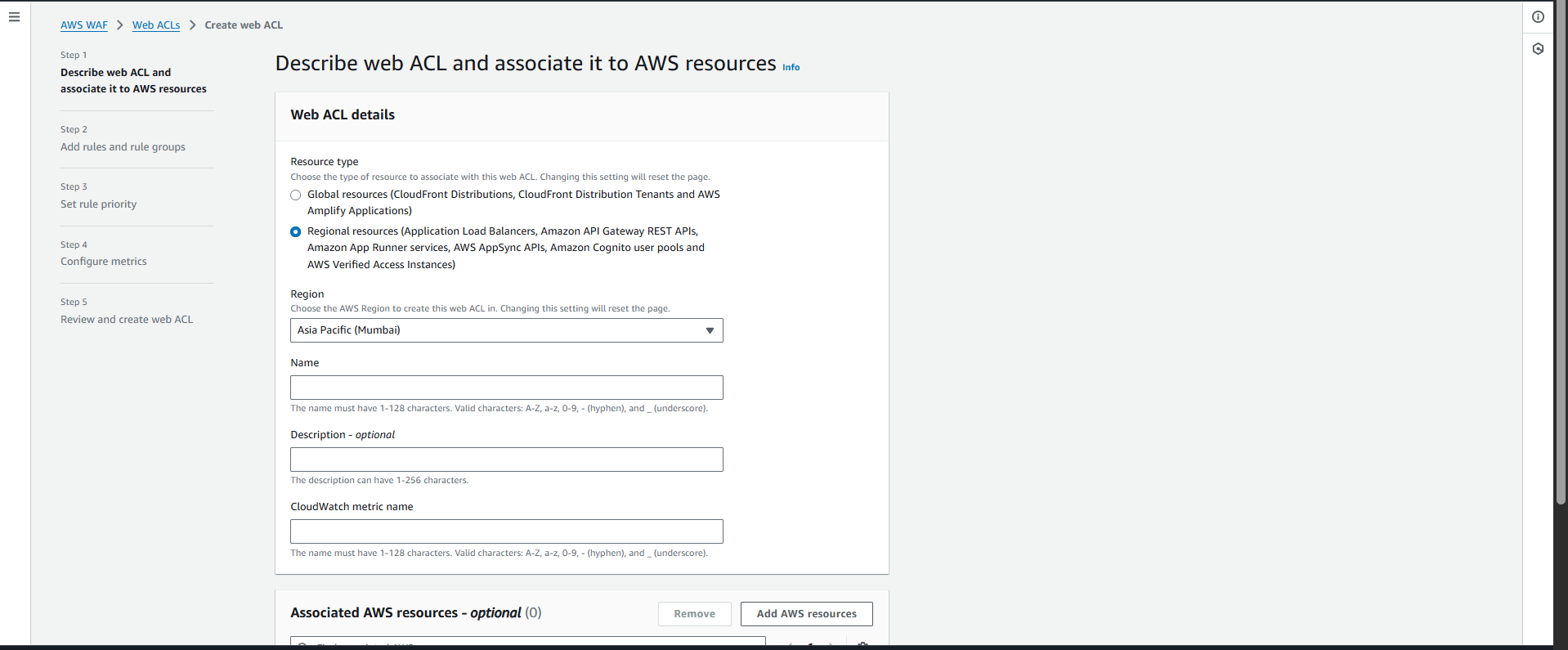
Added:



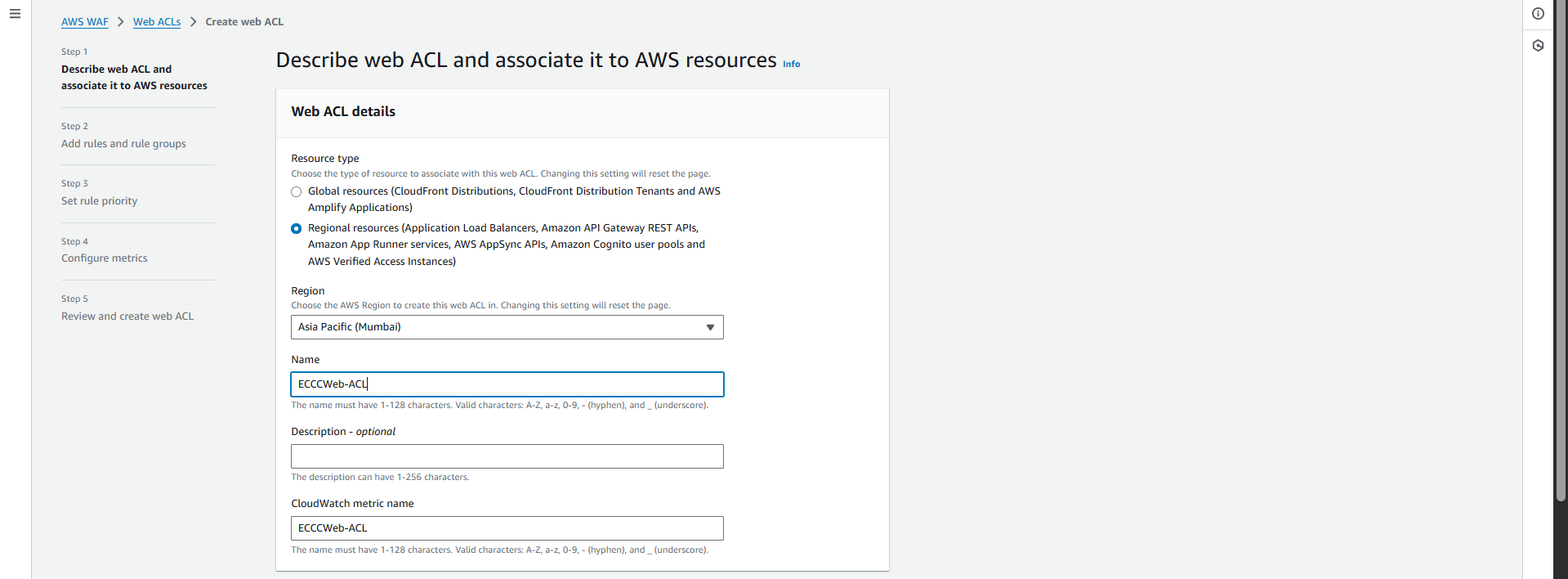
Now, we will be creating WEB ACL in WAF: click on the “Web ACLs” from the left pane.

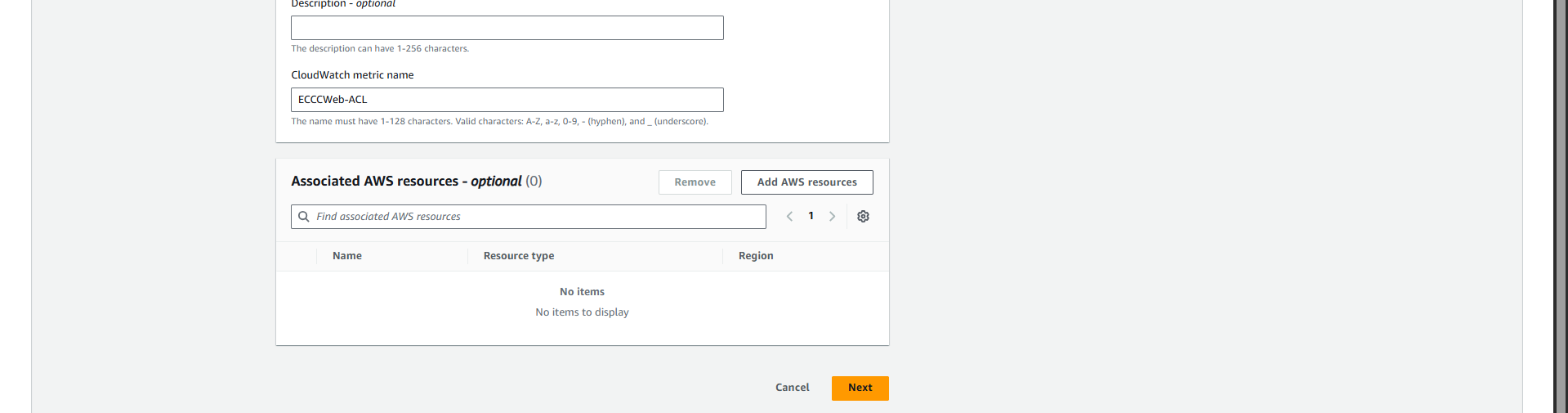


Click on the “Create Web ACL” button:

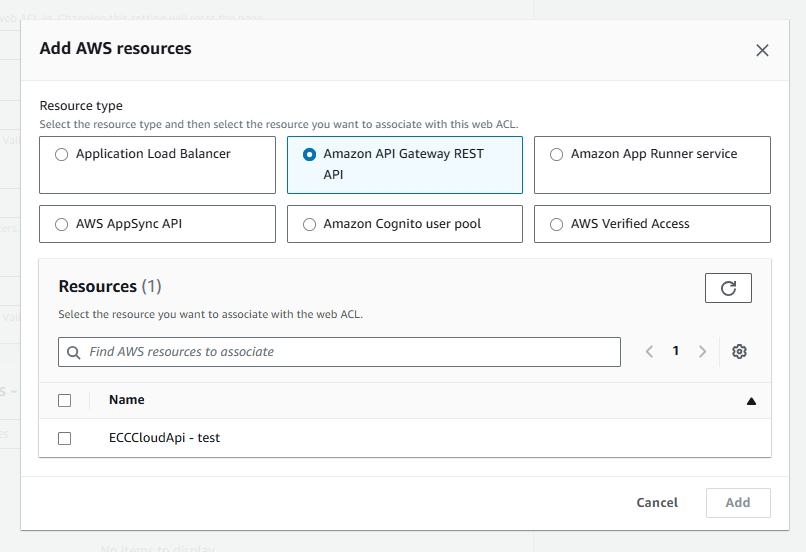


Now, specify it as like this:

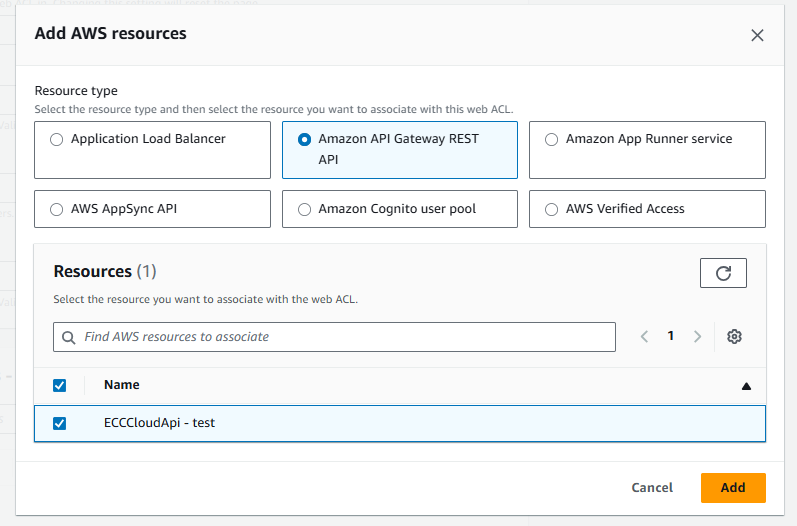


Now, “Add AWS Resources”:

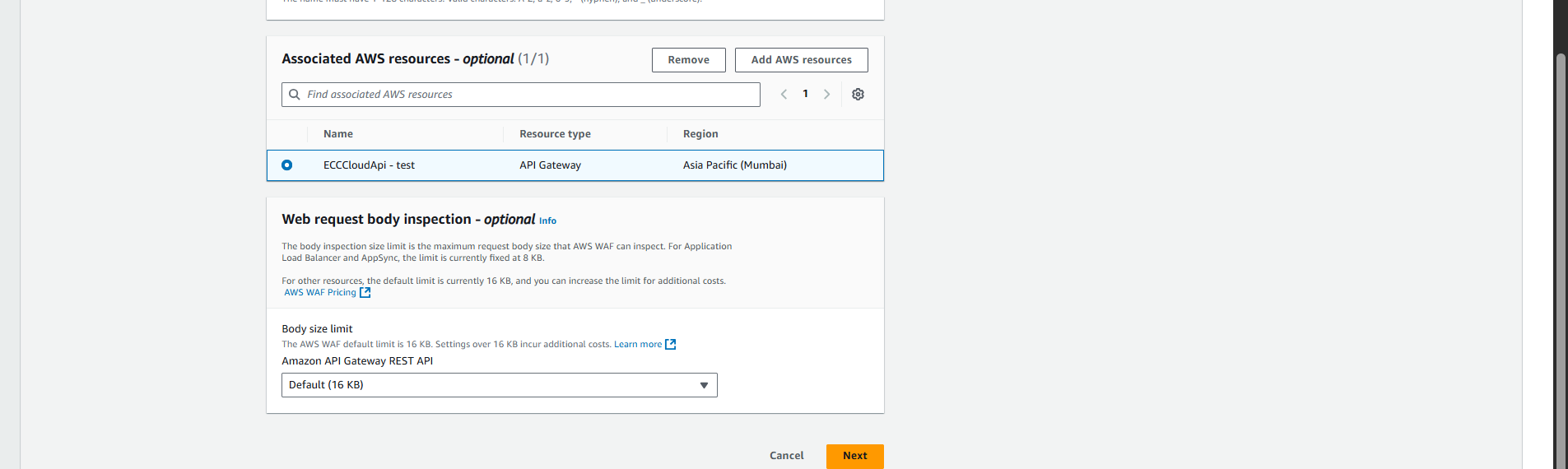
Following options occur:



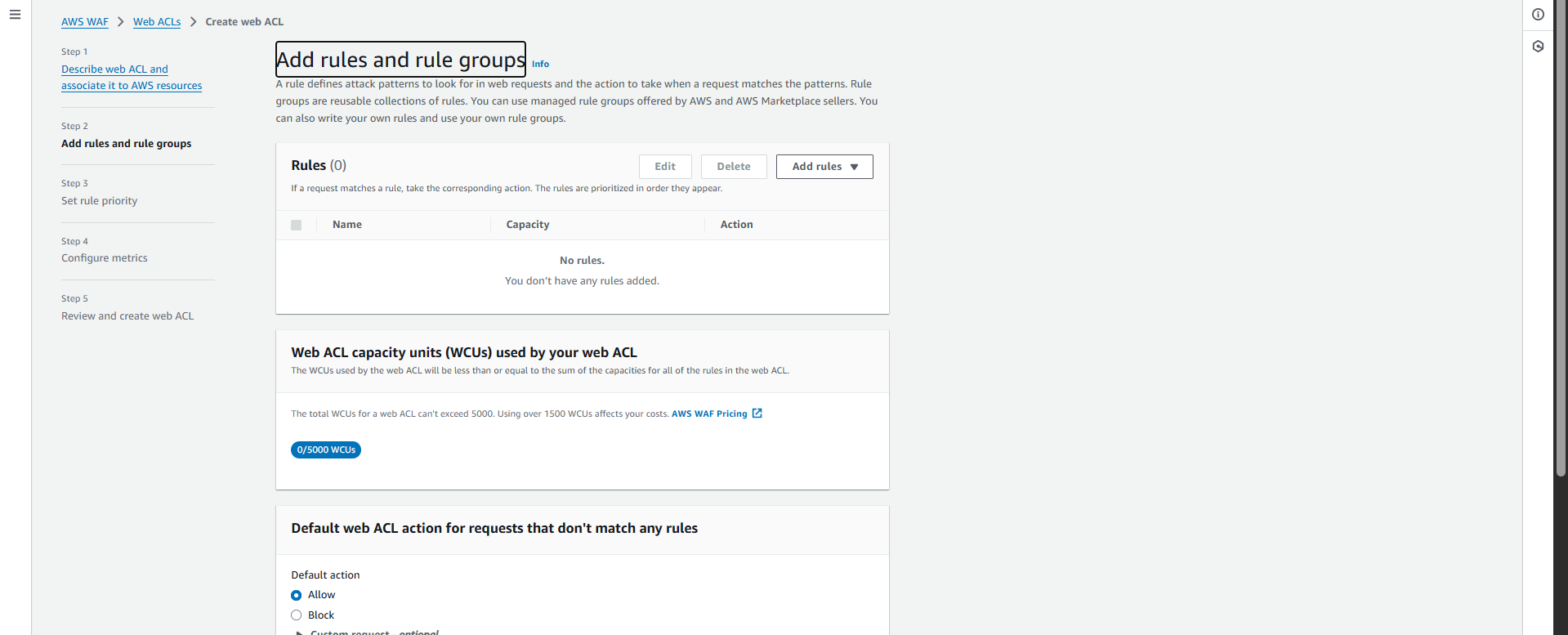
Click on the:



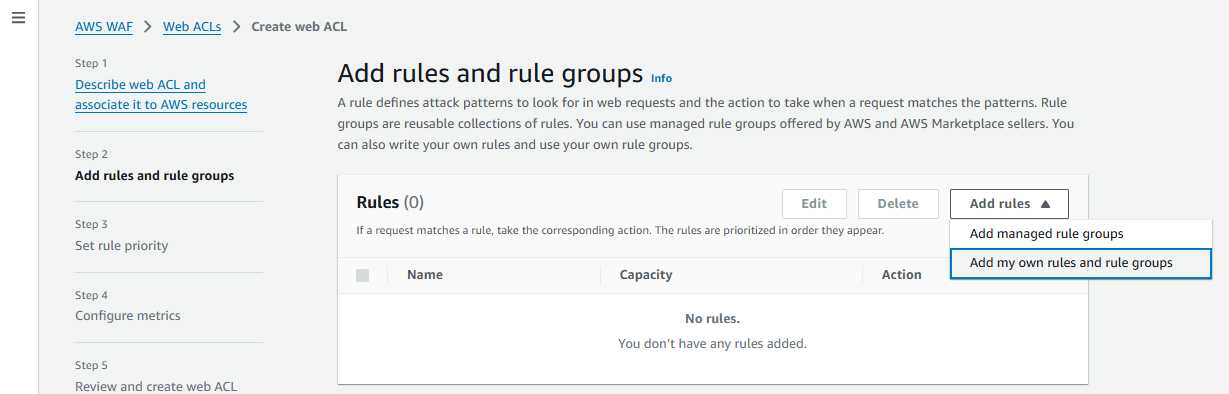
Following things shown:



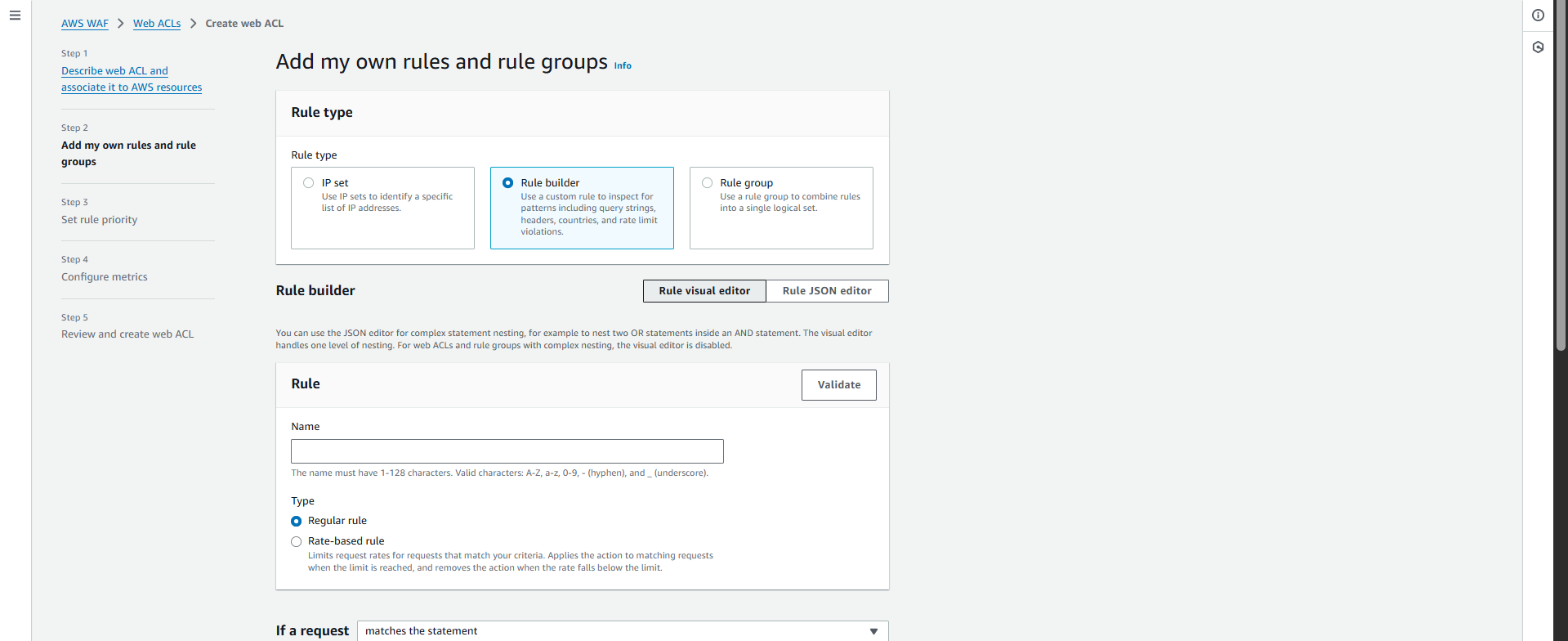
Following screen will appear:



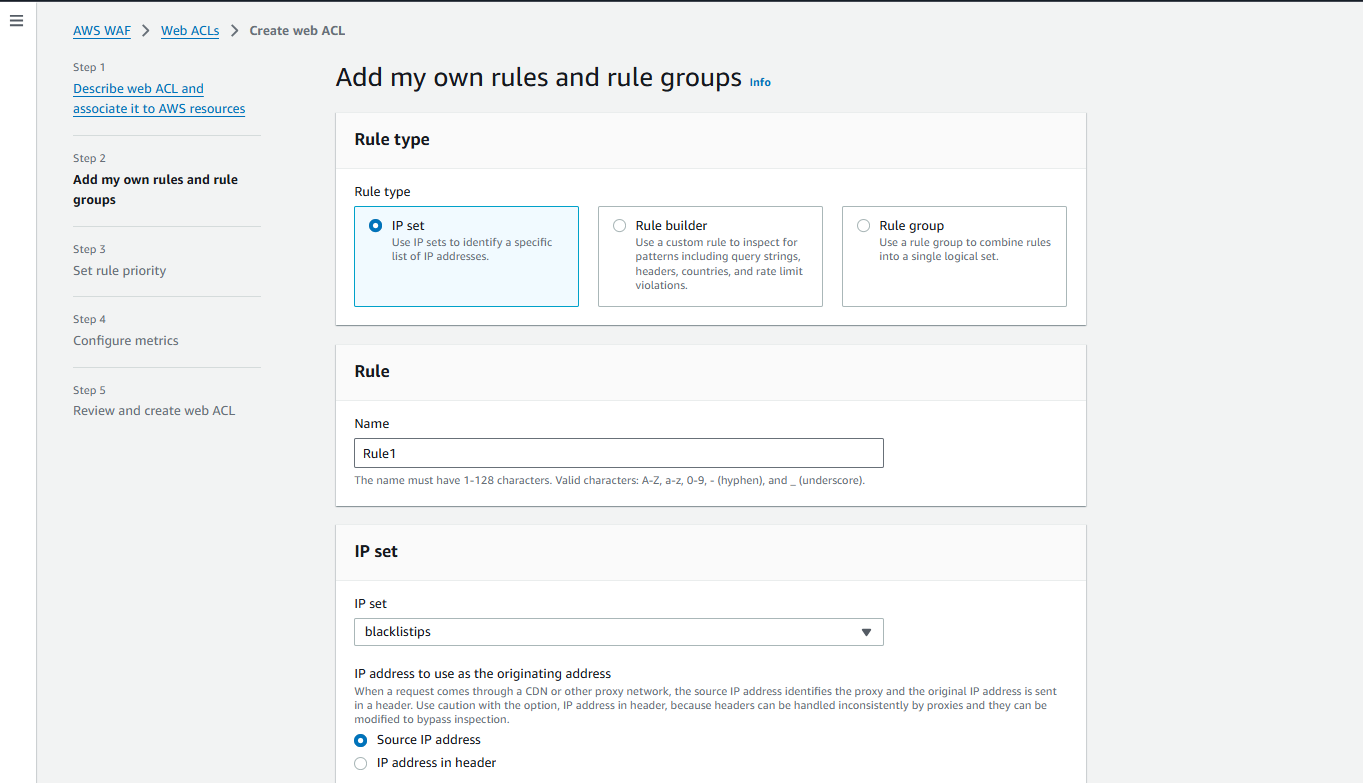
Click on the “Add rules”, click on the “Add my own rules and rule groups”:



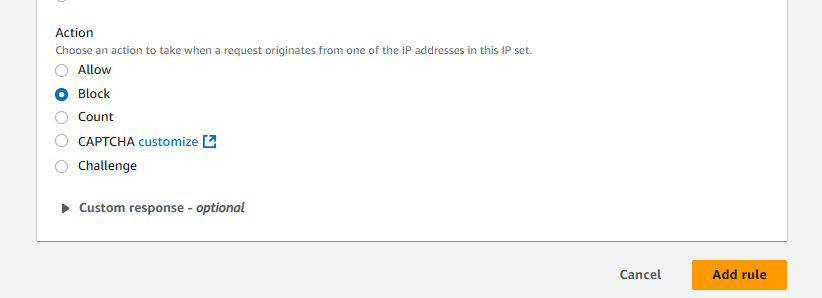
Following screen appears:



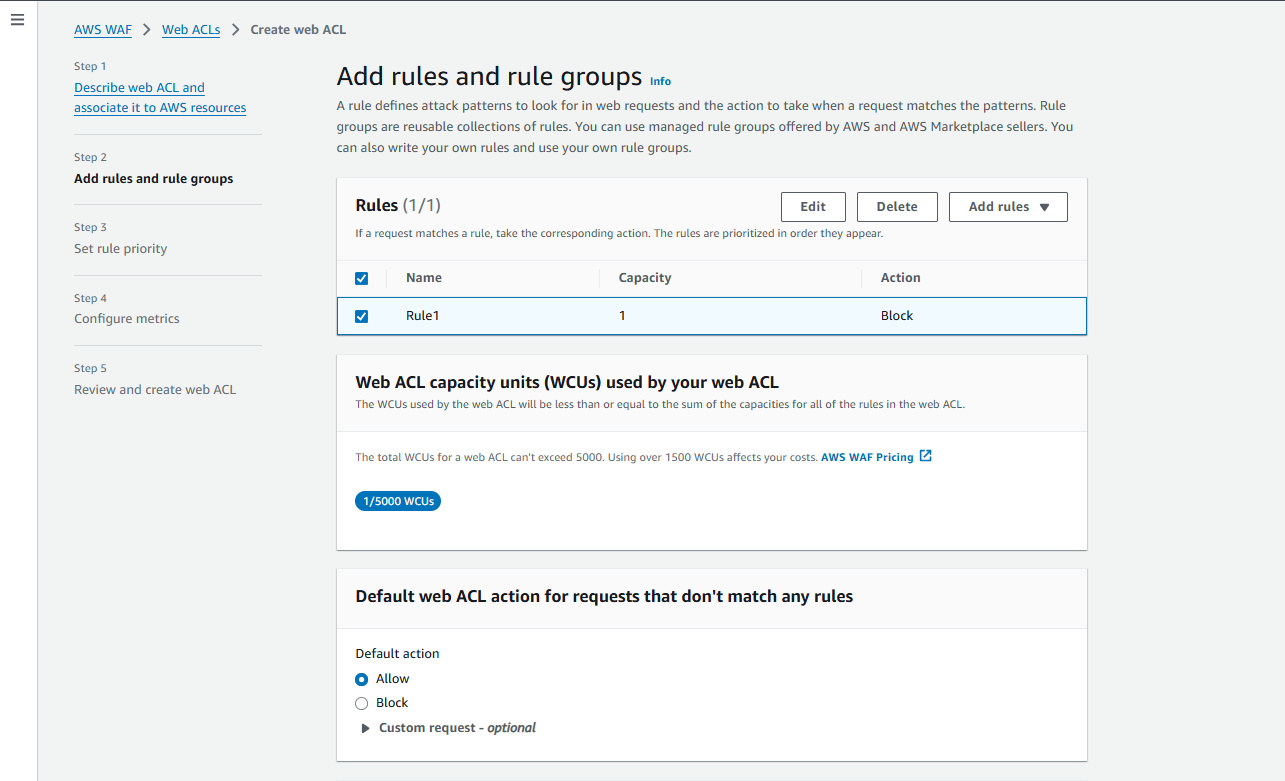
Make following changes:



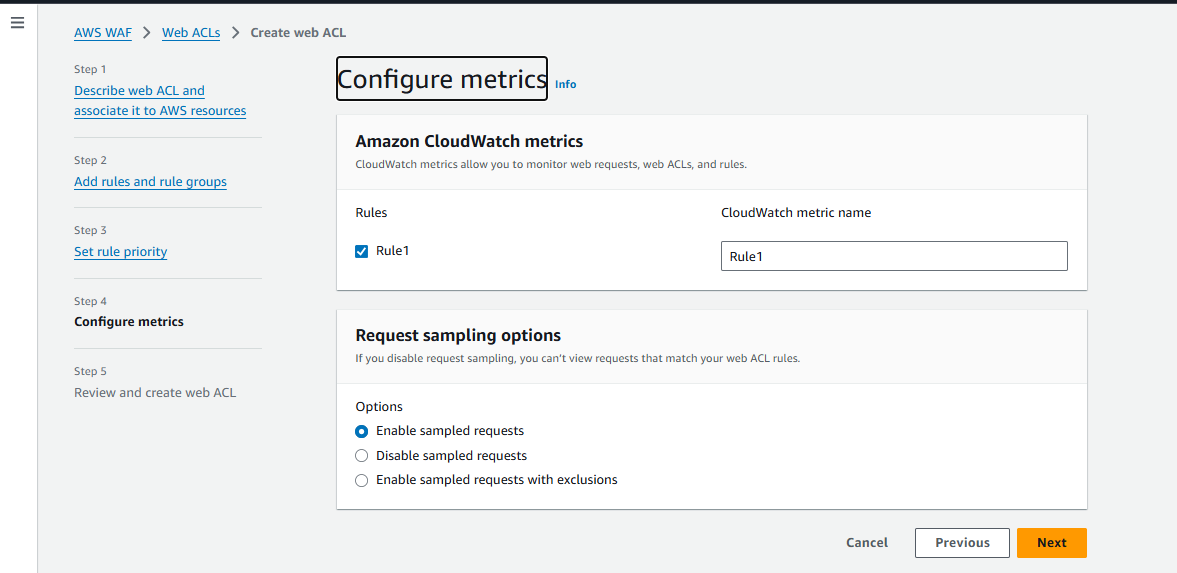
Also, ensure:



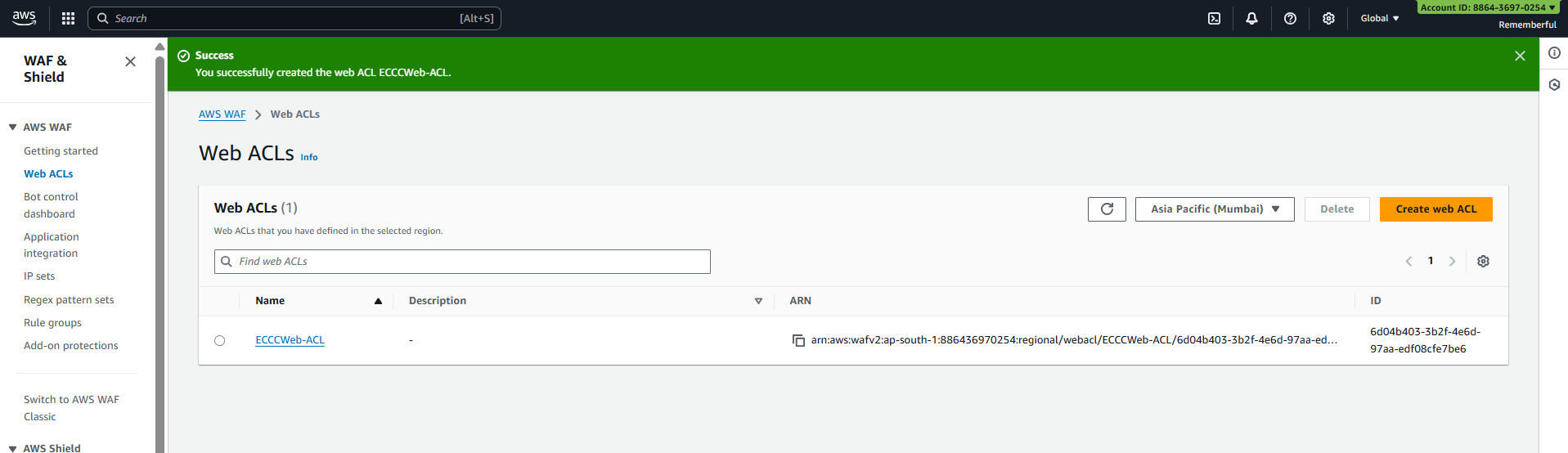
Click on “add rule” button:



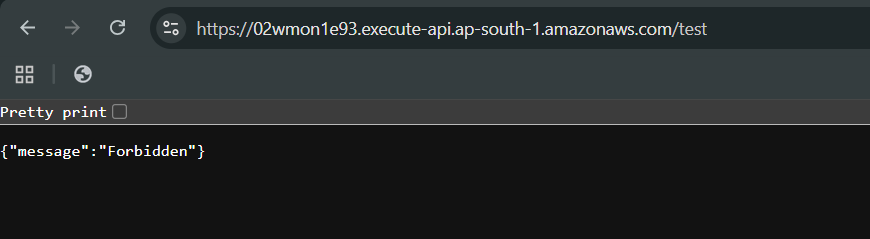
Click on the “next” button:



Following confirmation will occur:



Reopen the Invoke URL: clearly it worked.



--The End--