## Littlebit Advance Labs



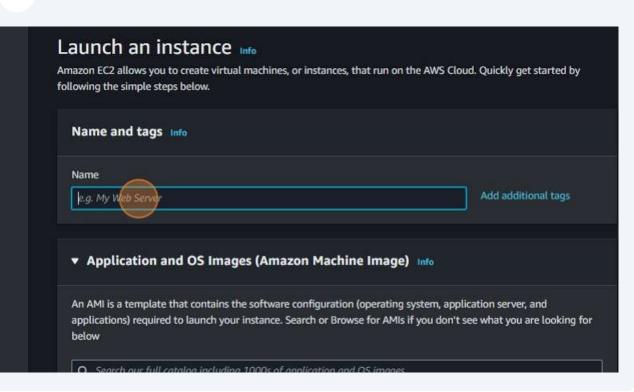
### EC2 with ELB and ASG

1

Navigate to <a href="https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:v=3;\$case=tags:true%5C,client:false;\$regex=tags:false%5C,client:false;sort=instanceState">https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:v=3;\$case=tags:true%5C,client:false;\$regex=tags:false;\$regex=tags:false;\$regex=tags:false;\$regex=tags:false;\$regex=

2 Click "Launch instances" [Alt+S] 4 N. Virginia v voclabs/user2999825=Sabin\_Dangal @ 6938-0821-1005 ▼ 2 0 0 0 C Instance state ▼ **Actions** ▼ Launch instances 1 > 0 Any state ۳ Status check Instance state Instance type Alarm status Running @ Q t2.micro 2/2 checks passed View alarms + 0a2b7c805 Running @ Q t2.micro 0dfb7bf25 @ @ 2/2 checks passed View alarms + t2.micro 21bca6fb18 2/2 checks passed View alarms + Q Q t2.micro U! 71e72ccec **⊘** Running @ Q 2/2 checks passed View alarms + t2.micro 07e5268c0 Running 2/2 checks passed View alarms + @ Q t2.micro u: 27b99d98a Running Q Q t2.micro 2/2 checks passed View alarms + u: @ X

Click the "Name" field.



Type "lb-asg-webserver"

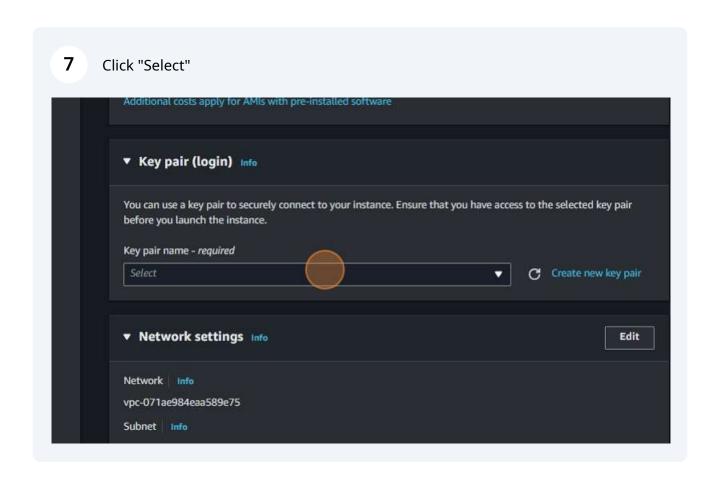
5 Click the "Number of instances" field. [Alt+S] Σ 4 @ 0 N. Virginia ▼ voclabs/user2999825=Sabin\_Dangal @ S images **▼** Summary Number of instances Info Red Hat SUSE L Software Image (AMI) Browse more AMIs Amazon Linux 2023 AMI 2023.3.2...read more Including AMIs from AWS, Marketplace and the Community 6 ami-0440d3b780d96b29d Virtual server type (instance type) t2.micro Free tier eligible Firewall (security group) d1974b8b (64-bit (Arm), uefi) New security group

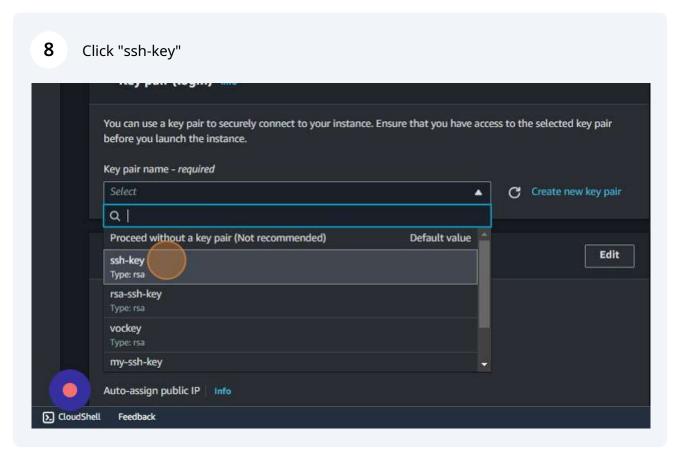
Storage (volumes)

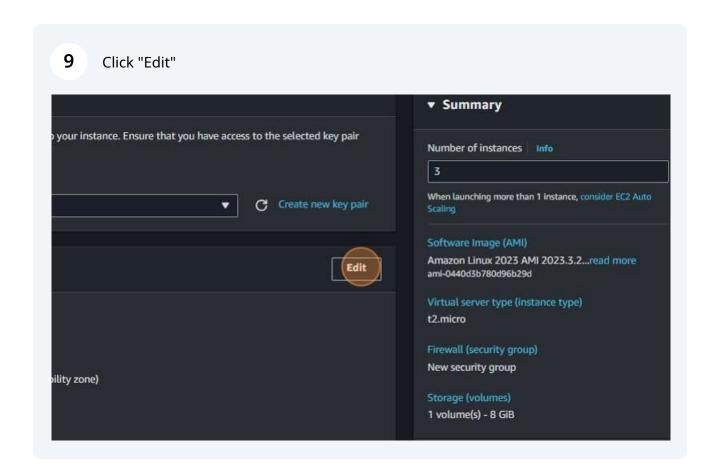
1 volume(s) - 8 GiB

**6** Type " **up up**"

el-6.1

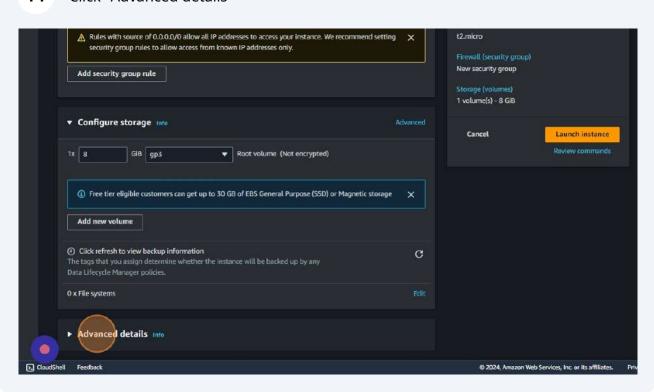




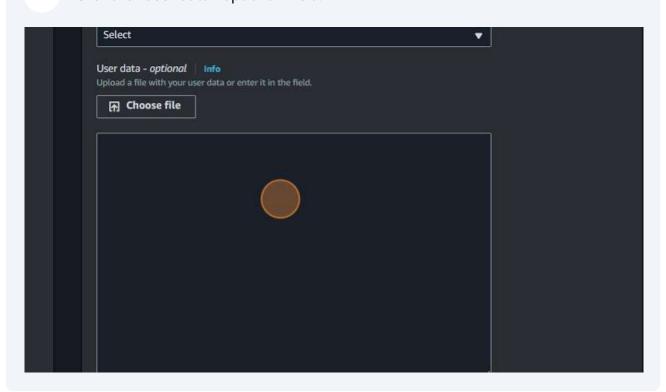


10 Click the "Security group name - required" field. Auto-assign public IP Info Enable Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your Create security group Select existing security group Security group name - required launch-wizard-8 This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and \_-</(#,@[]+=&;[)!\$\* Description - required Info launch-wizard-8 created 2024-02-20T18:29:44.508Z **Inbound Security Group Rules** Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove

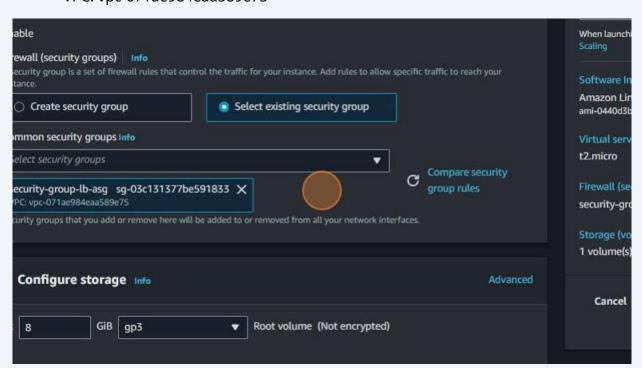
### 11 Click "Advanced details"



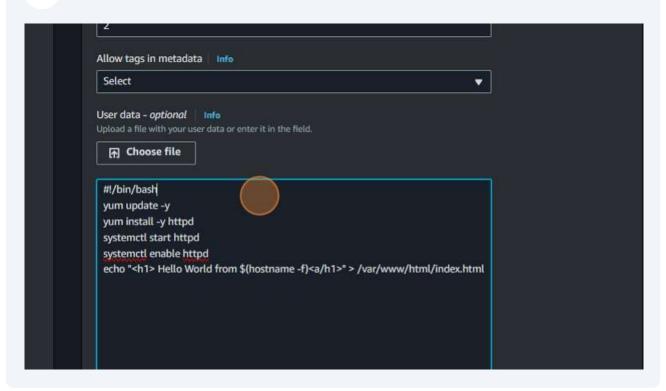
12 Click the "User data - optional" field.



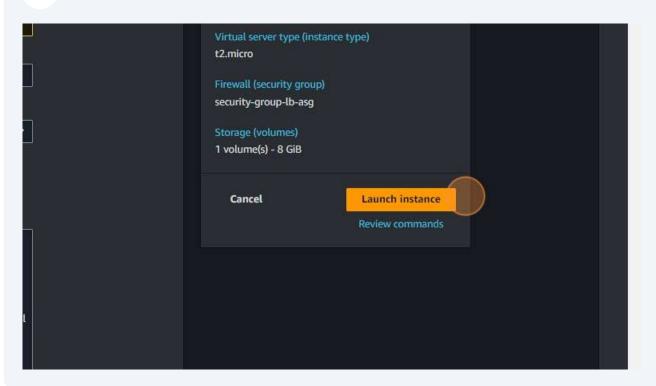
Click "security-group-lb-asg sg-03c131377be591833 VPC: vpc-071ae984eaa589e75"



14 Click the "User data - optional" field.

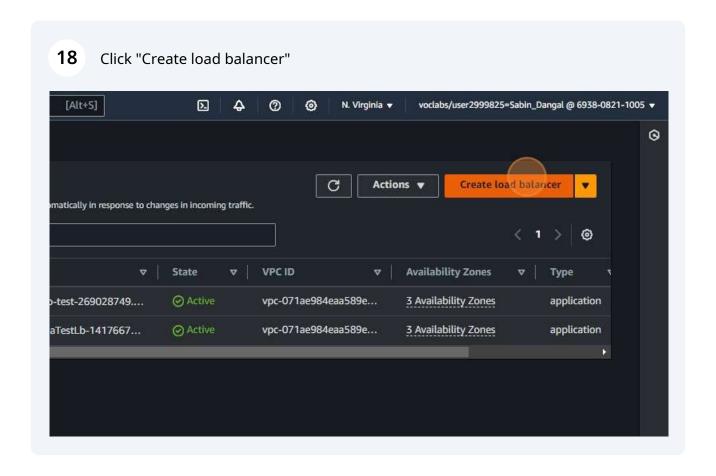


### 15 Click here.



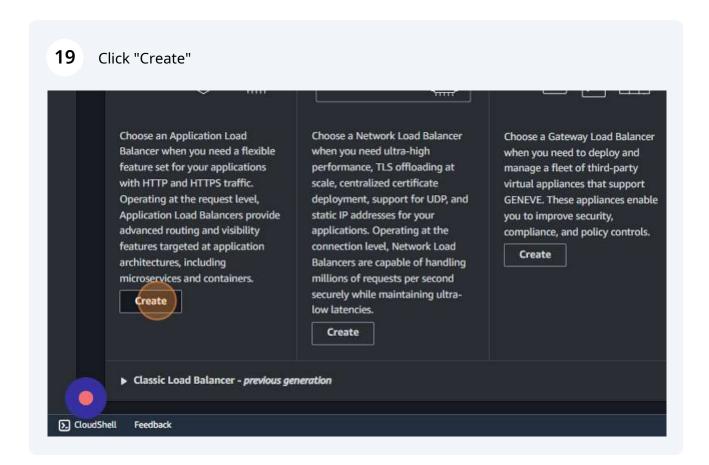
Navigate to <a href="https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:sort=instanceState">https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:sort=instanceState</a>

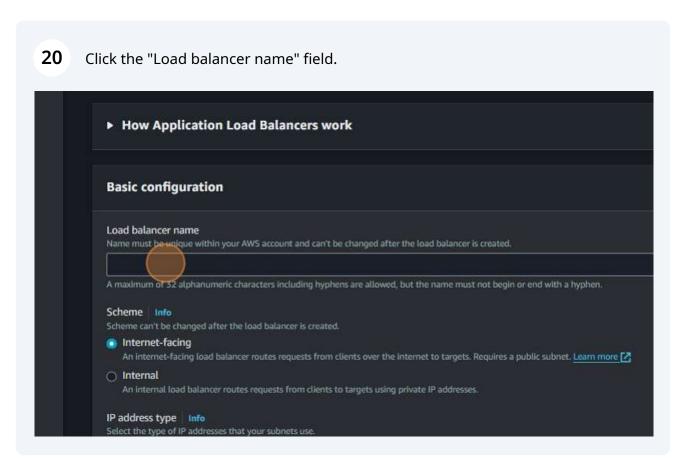
### 17 Click "Load Balancers" test-web-server i-02d2fee7b836ce06e ○ Terminated ▼ Network & Security ○ Terminated test-web-server Security Groups test-server i-0e55041baea6be254 Terminated Elastic IPs i-0a808299406359396 test-server ← Terminated **Placement Groups** LOGATENHADATSTADEA **Key Pairs** tact\_carvar\_Z **Network Interfaces** Select an instance **▼ Load Balancing** Load Balancers Target Groups Trust Stores New **▼** Auto Scaling Auto Scaling Groups



CloudShell

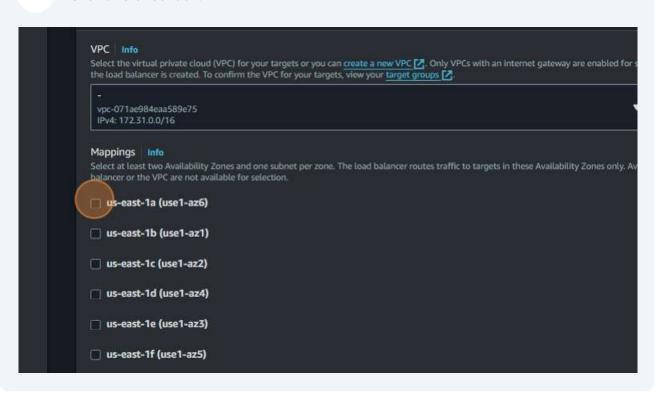
Feedback



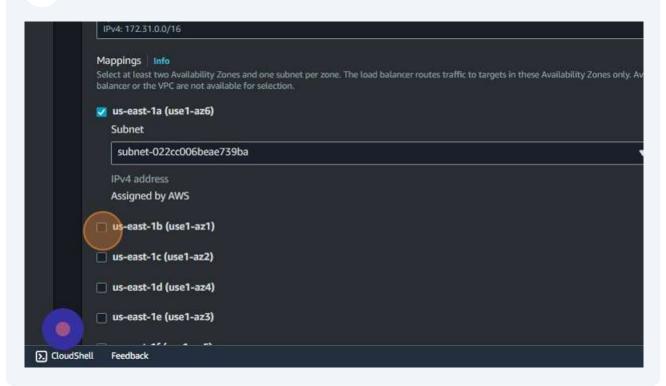


21 Type "load-balancer-adv"

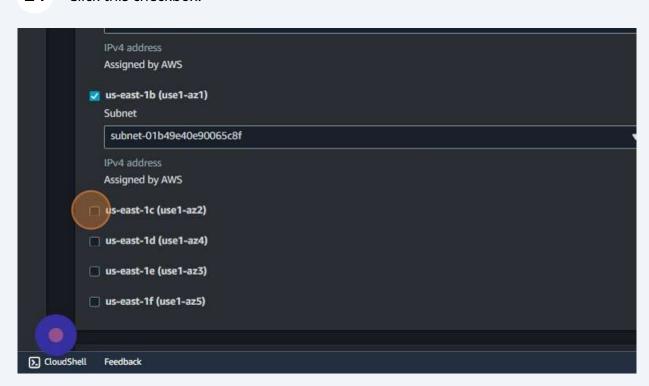
**22** Click this checkbox.



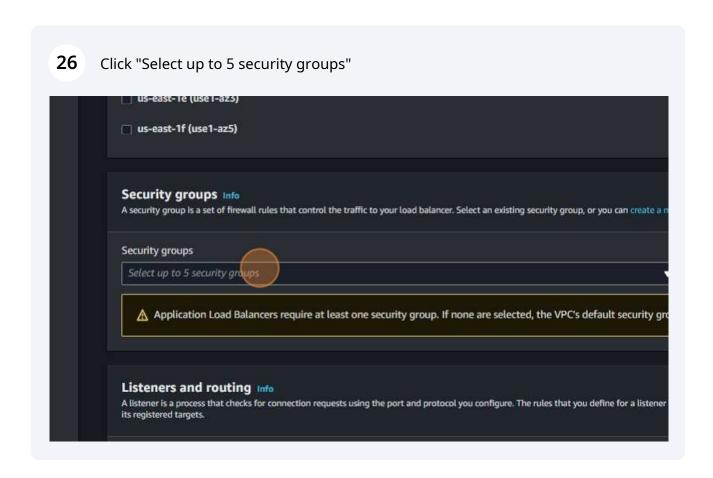
### 23 Click "us-east-1b (use1-az1)"



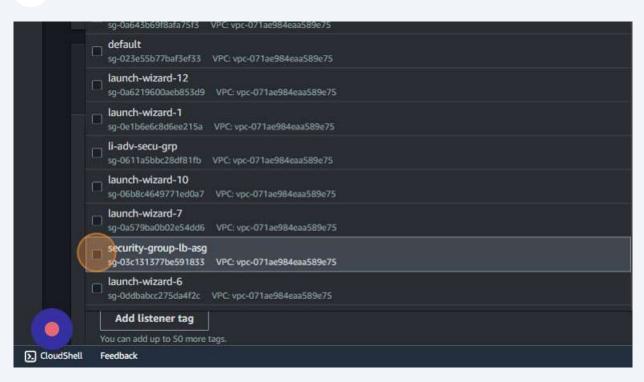
### **24** Click this checkbox.



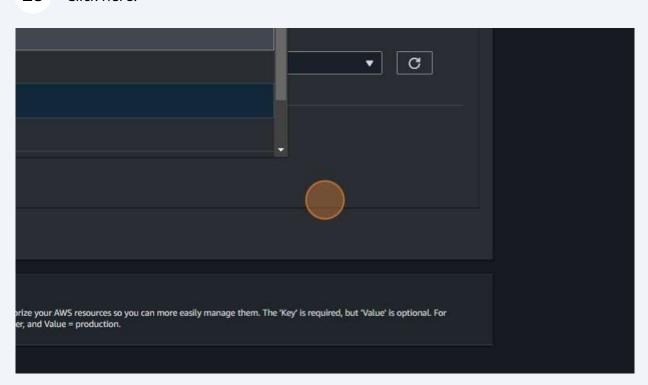
## Security groups Info A security groups Info Security groups Info A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can create a new Security groups Select up to 5 security groups default sg-023e55b77baf3ef33 VPC: vpc-071ae984eaa589e75 Listeners and routing Info A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener or its registered targets.

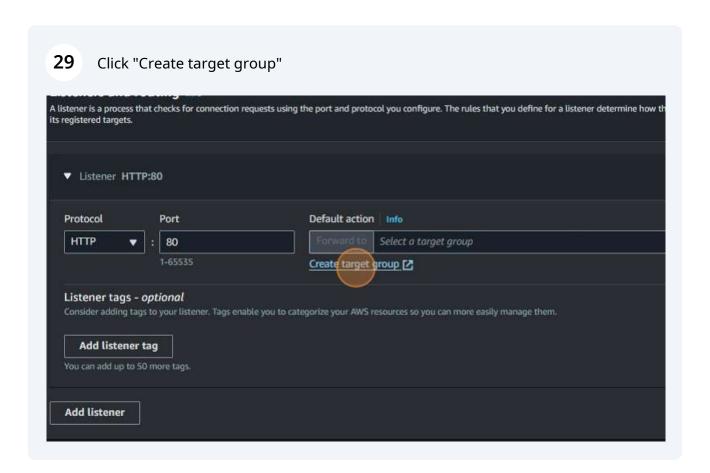


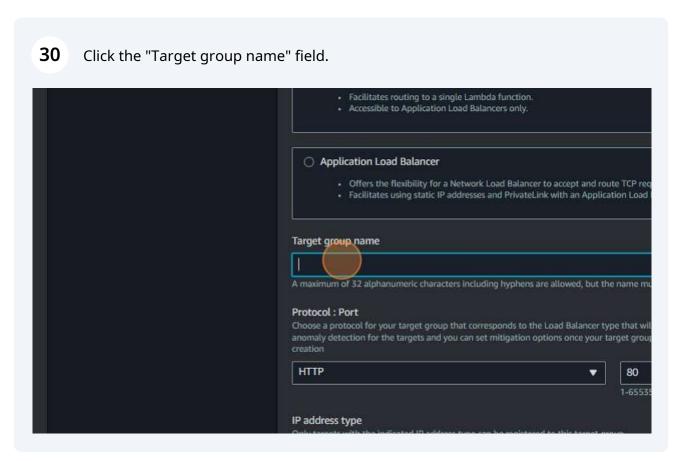
## 27 Click here.



### 28 Click here.

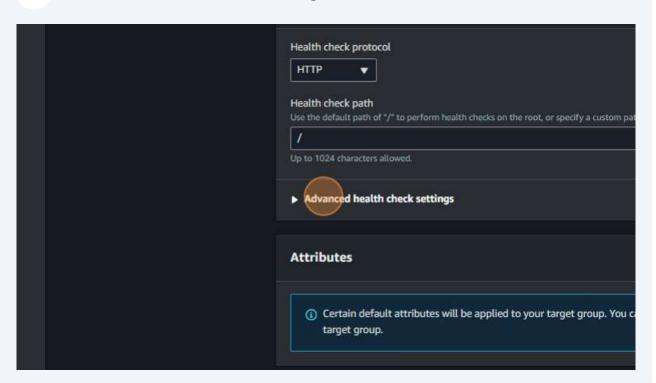




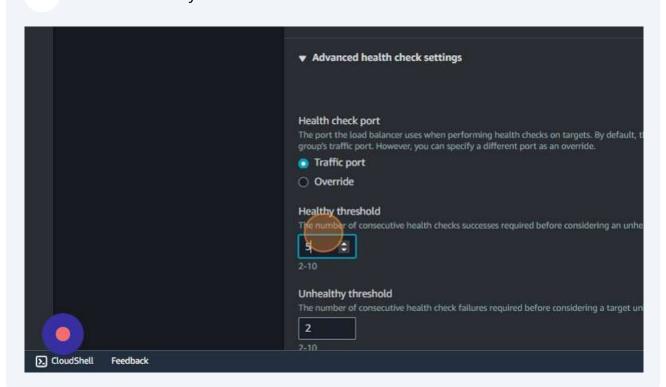


Type "target-grp-adv"

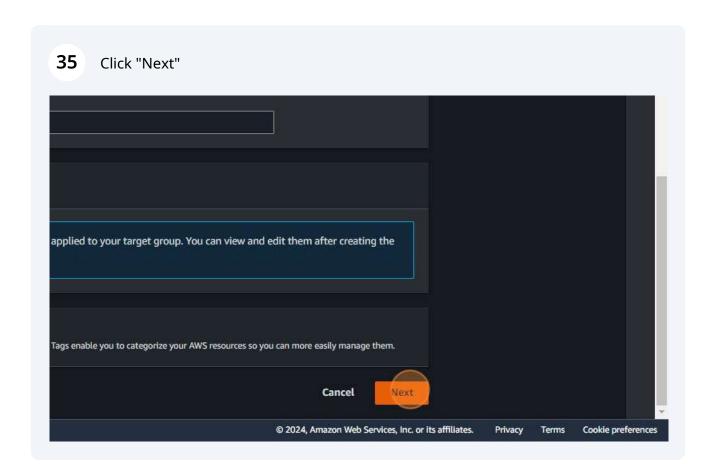
Click "Advanced health check settings"

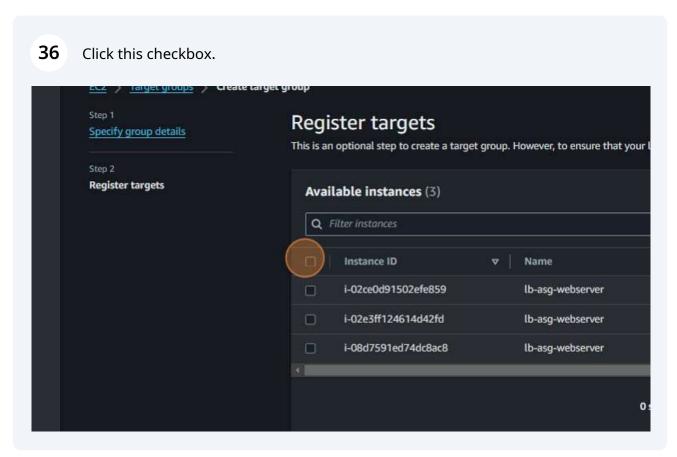


33 Click the "Healthy threshold" field.

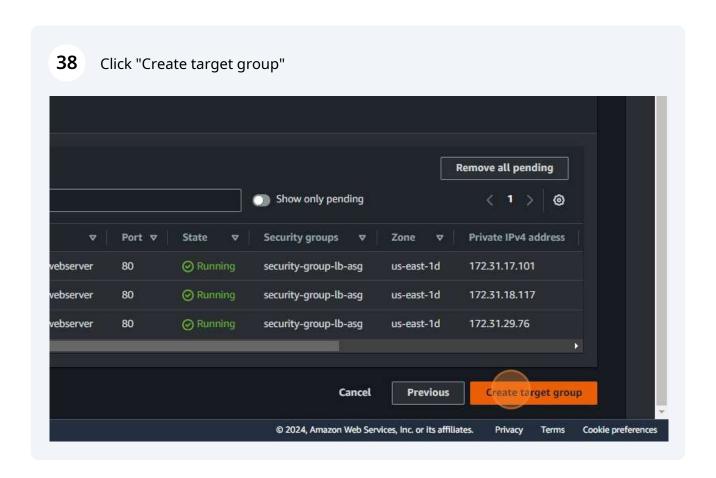


**34** Type " **Backspace** 3"

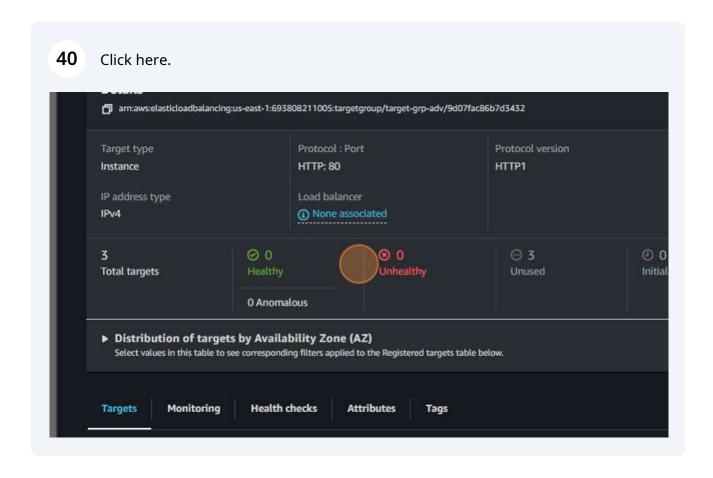




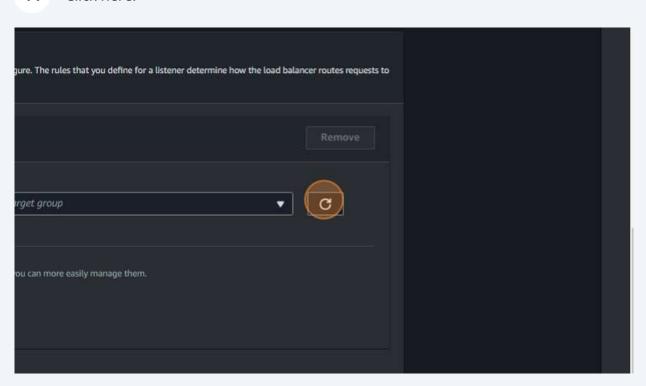
# 3 selected Ports for the selected instances. Ports for routing traffic to the selected instances. 80 1-65535 (separate multiple ports with commas) Include as pending below Pargets (0) Remove at the selected instances. Show only pending



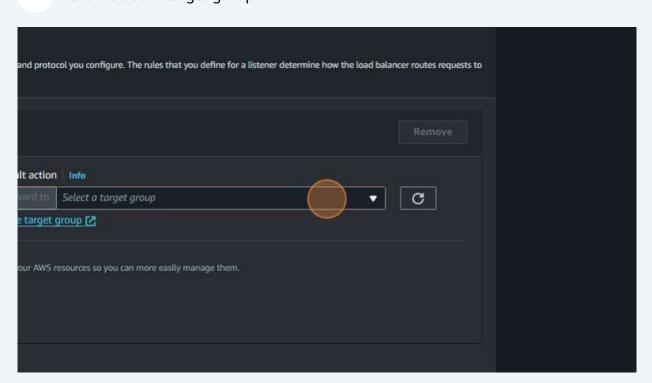
### 39 Click here. voclabs/user2999825=Sabin\_Dangal @ 6938-0821-1005 ▼ [Alt+S] 2 4 0 0 N. Virginia 🔻 0 nomaly detection is automatically applied to all registered targets. Results can be viewed in the Targets tab. **Actions** ▼ to increase application availability × ng on anomaly mitigation, which provides responsive, dynamic distribution of traffic to targets based on rget groups now include anomaly detection by default. Learn more 🔀 rgetgroup/target-grp-adv/9d07fac86b7d3432 Protocol version VPC Port HTTP1



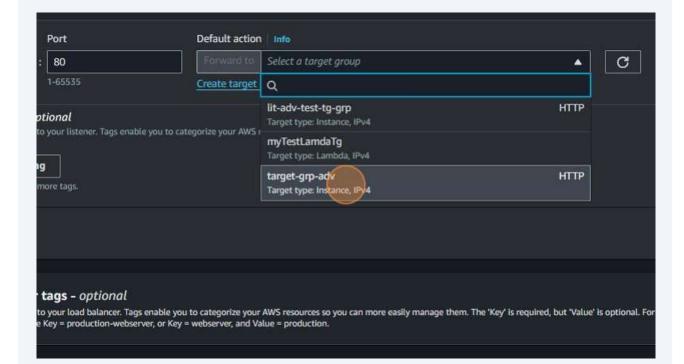
### 41 Click here.



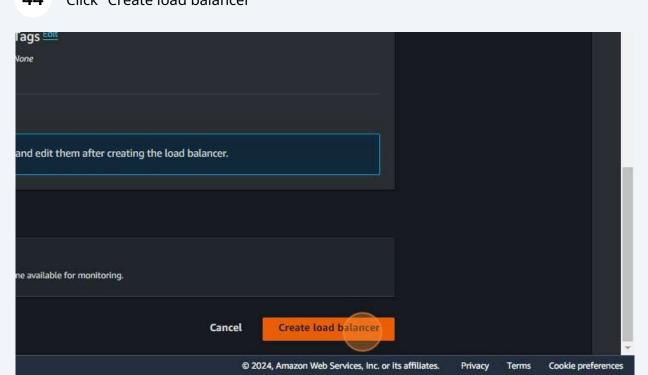
## 42 Click "Select a target group"



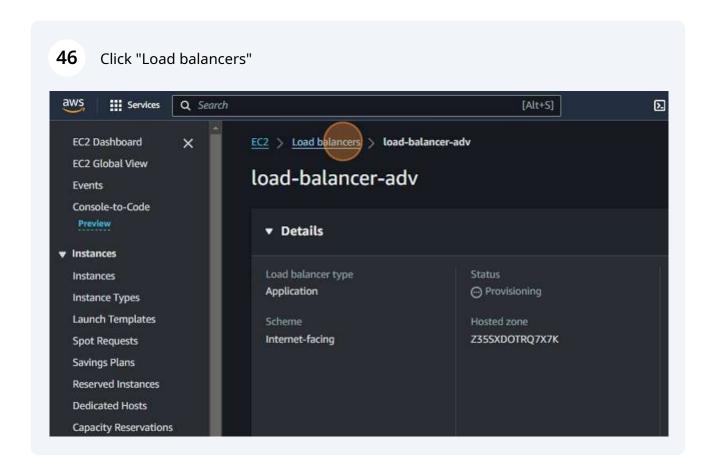
## 43 Click "Target type: Instance, IPv4"



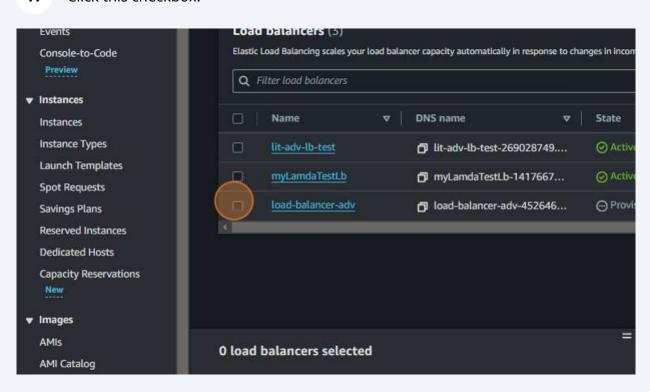
### 44 Click "Create load balancer"



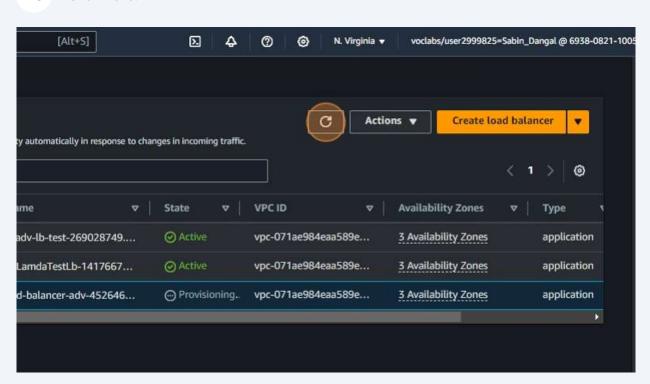
### 45 Click here. voclabs/user2999825=Sabin\_Dangal @ 6938-0821-1005 ▼ [Alt+S] 2 4 @ 0 N. Virginia 🔻 0 ly set up and route traffic. Targets will also take a few minutes to complete the registration process and pass initial C **Actions** ▼ VPC IP address type sioning vpc-071ae984eaa589e75 [2] IPv4 Availability Zones Date created one OTRQ7X7K subnet-01b49e40e90065c8f 🔀 us-February 21, 2024, 00:38 east-1b (use1-az1) (UTC+05:45)

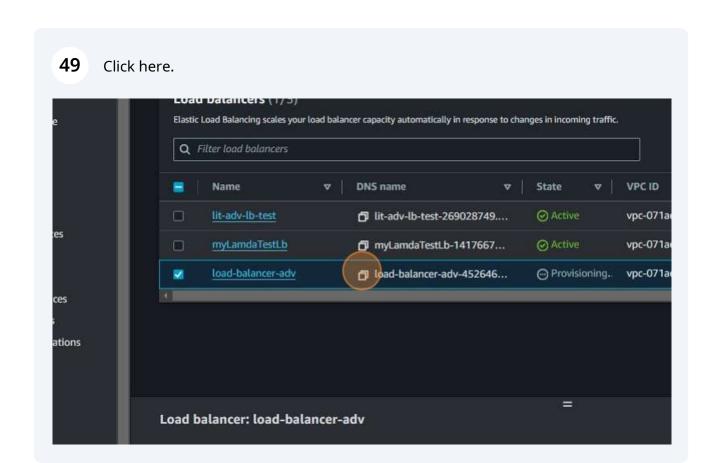


### **47** Click this checkbox.

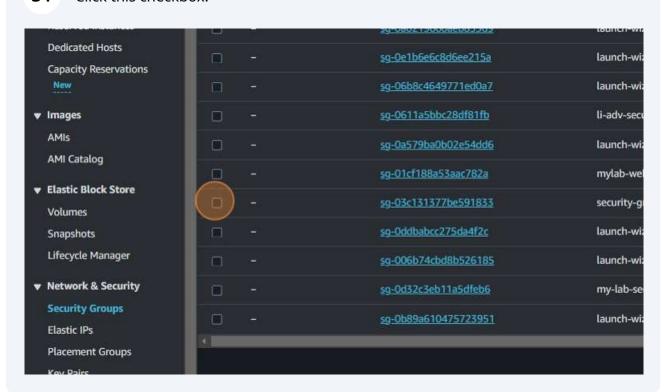


### 48 Click here.

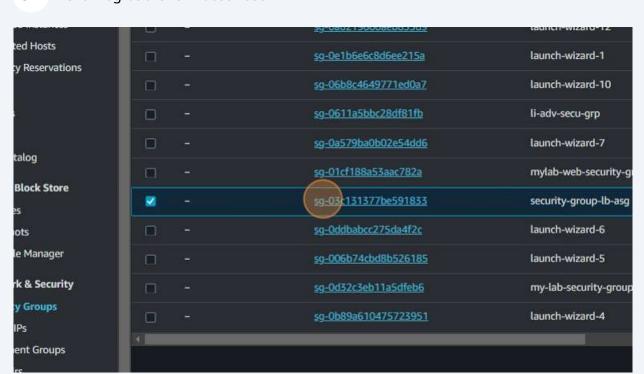




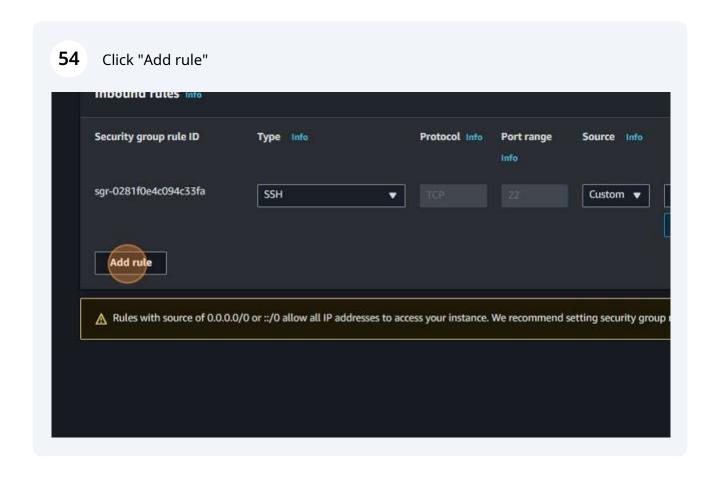
### Click this checkbox.

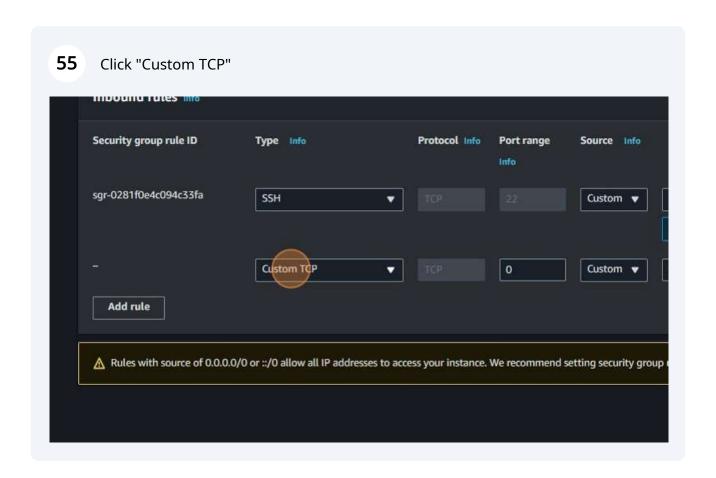


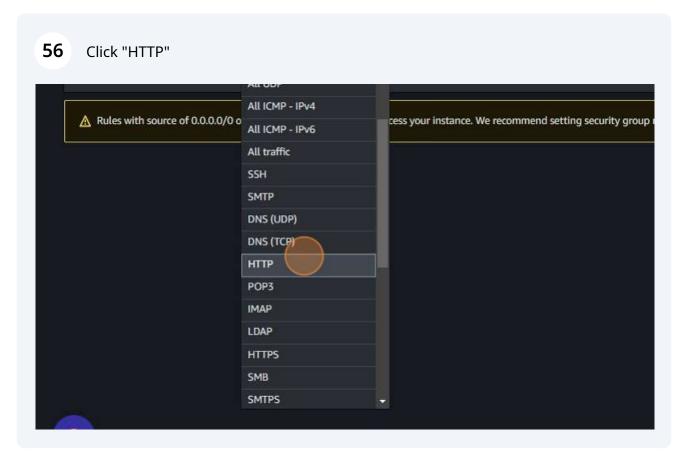
## Click "sg-03c131377be591833"

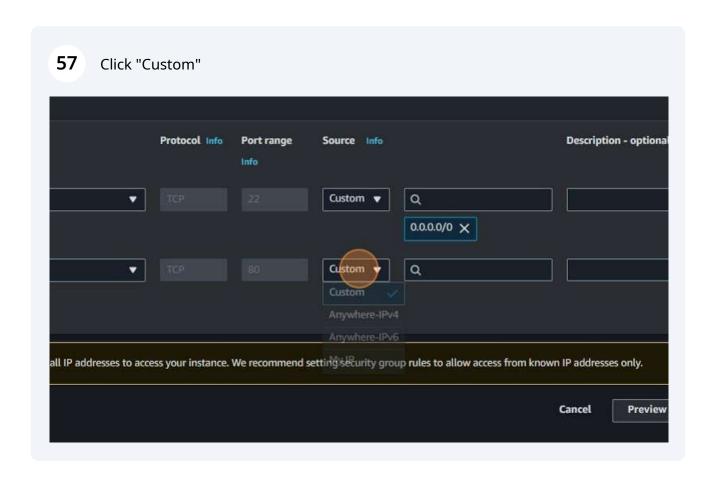


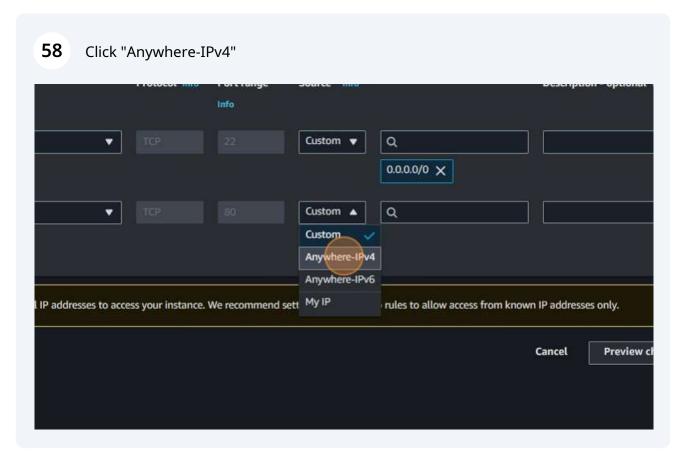
## 53 Click "Edit inbound rules" ssion entry 1 Permission entry Edit inbound rules C 0 rule... ▽ IP version Туре Protocol Port range 194c33fa IPv4 SSH TCP 22

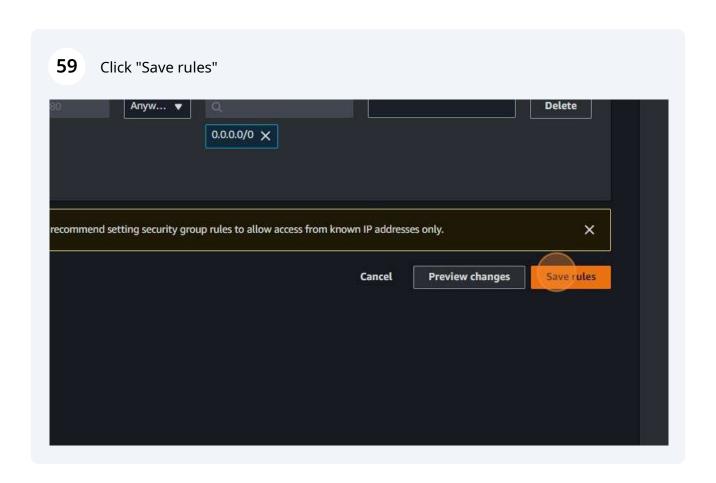


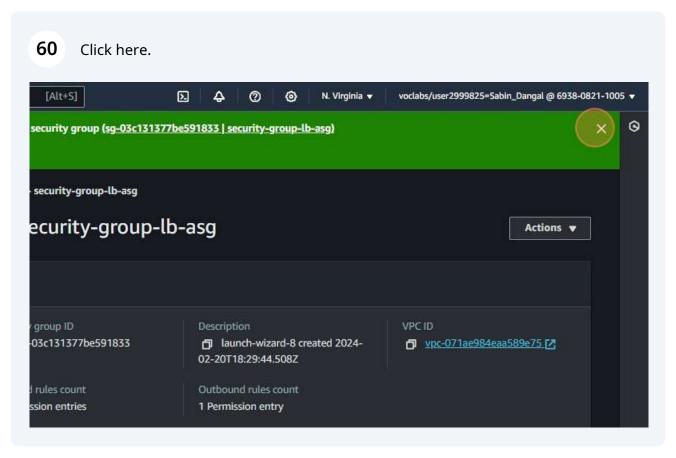


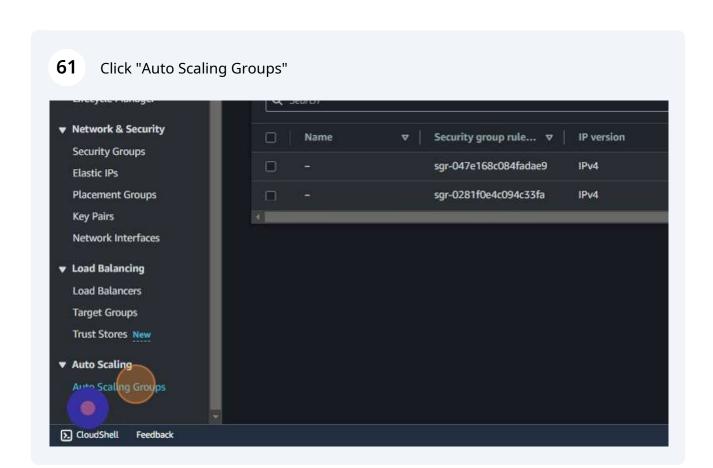


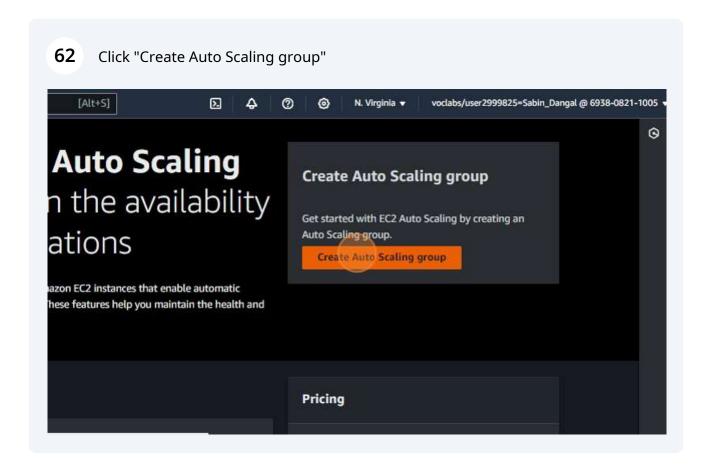




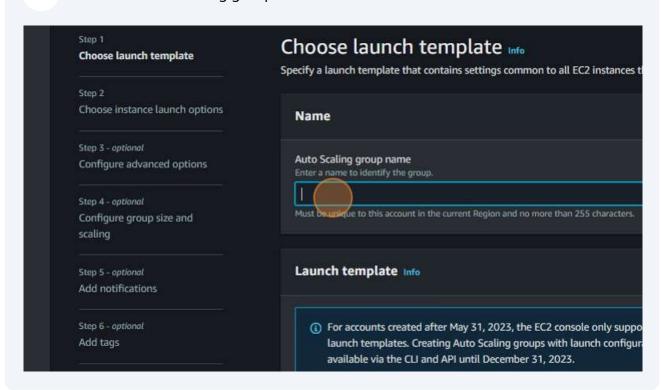






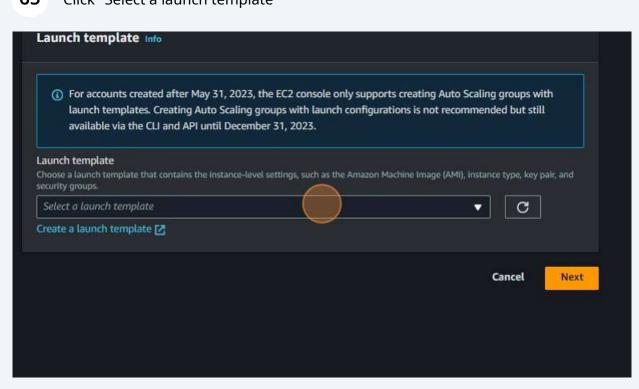


63 Click the "Auto Scaling group name" field.

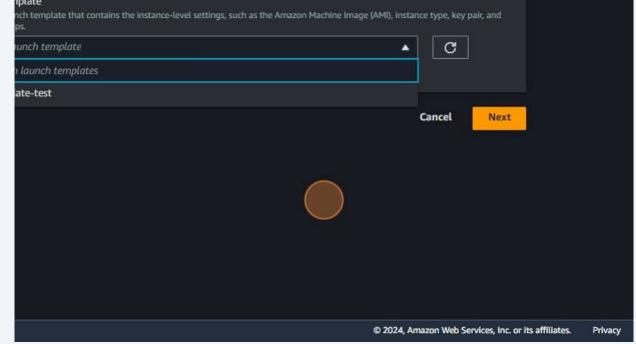


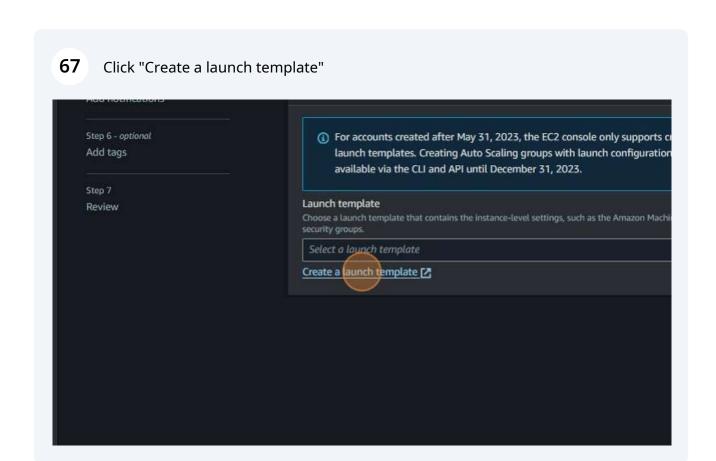
**64** Type "auto-scalling-grp-adv"

65 Click "Select a launch template"



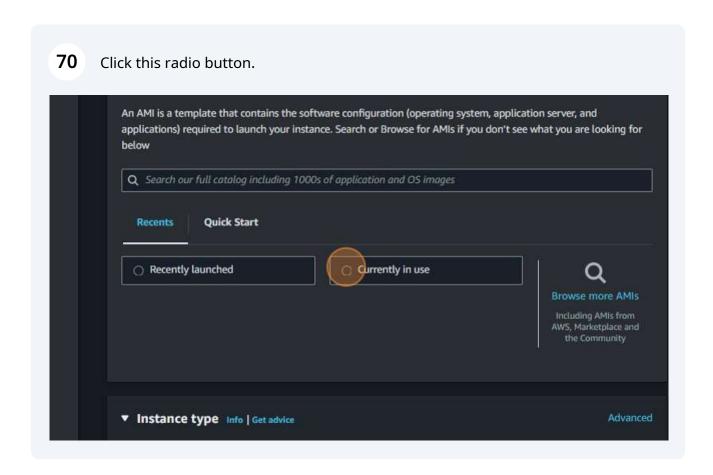
Click "EC2
Auto Scaling groups
Create Auto Scaling group
Step 1
Choose launch template
Step 2
Choose instance launch options
Step 3 - optional
Configur..."



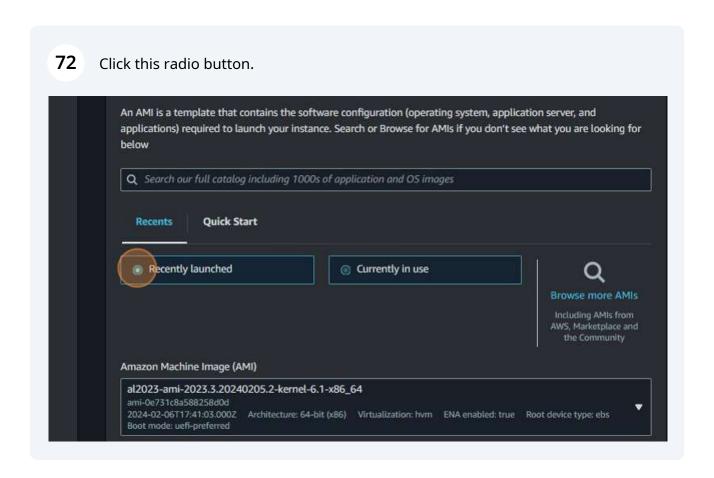


Type "template-lit-adv"

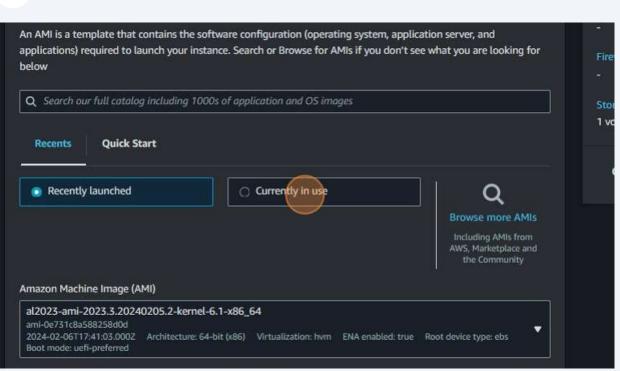
# An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below Q. Search our full catalog including 1000s of application and OS images Recents Quick Start Q. Recently launched Q. Browse more AMIs Including AMIs from AWS, Marketplace and the Community Instance type Info | Get advice



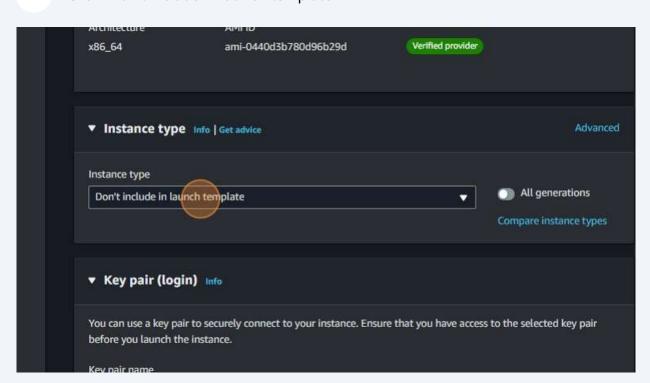
### 71 Click "Recently launched" An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below Q Search our full catalog including 1000s of application and OS images Recents **Quick Start** Recently launched Currently in use Browse more AMIs Including AMIs from AWS, Marketplace and Amazon Machine Image (AMI) al2023-ami-2023.3.20240219.0-kernel-6.1-x86\_64 ami-0440d3b780d96b29d 2024-02-16T21:29:42.000Z Architecture: 64-bit (x86) Virtualization: hvm ENA enabled: true Root device type: ebs Boot mode: uefi-preferred

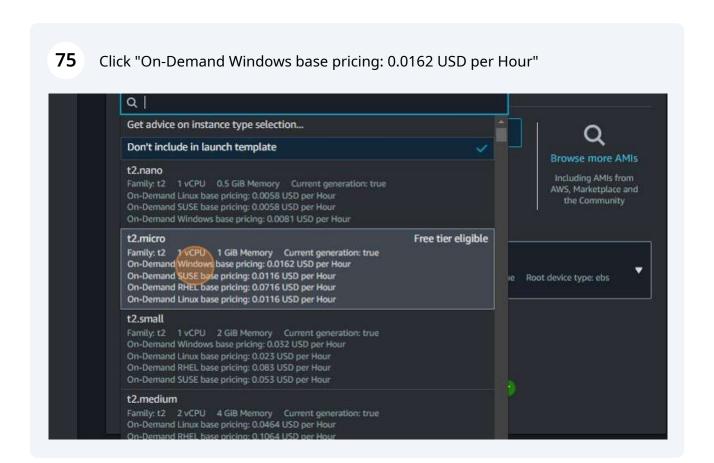


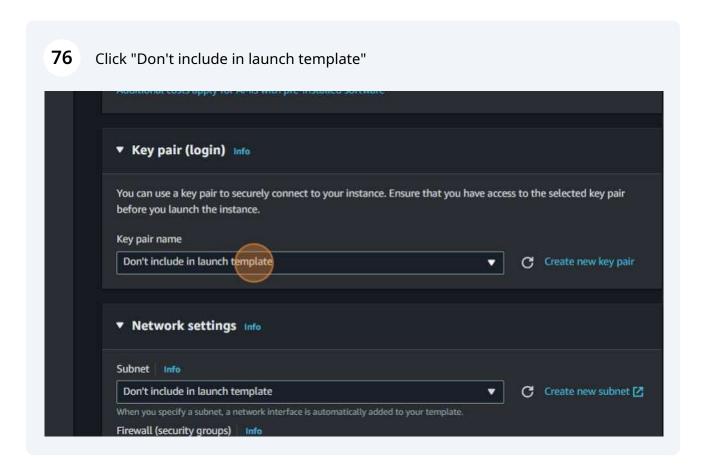
### 73 Click "Currently in use"



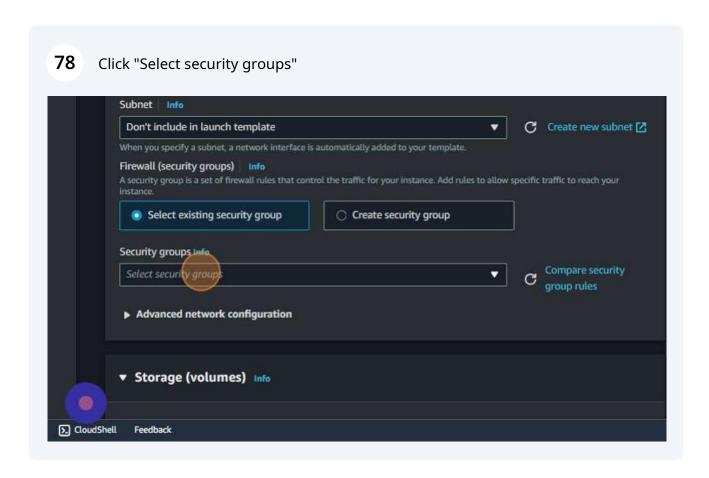
### 74 Click "Don't include in launch template"





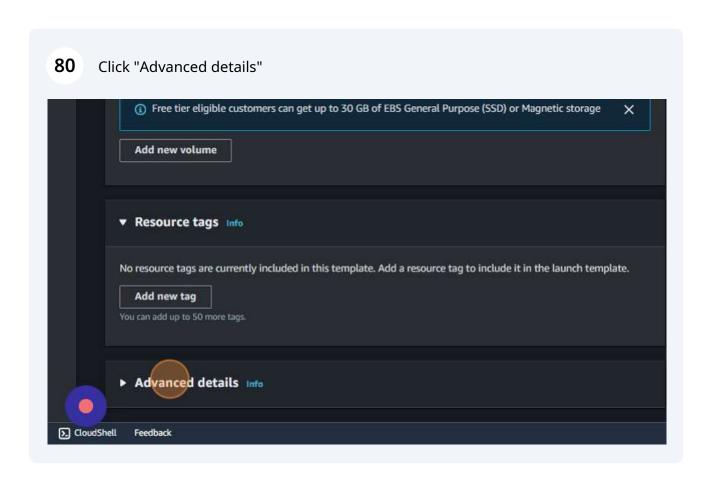


### 77 Click "ssh-key" You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance. Key pair name Don't include in launch template C Create new key pair • al Specify a custom value... Don't include in launch template ssh-key Type: rsa rsa-ssh-key C Create new subnet vockey my-ssh-key Select existing security group Create security group ▶ CloudShell Feedback



### 79 Click "security-group-lb-asg" Subnet Info C Create new subnet Don't include in launch template When you specify a subnet, a network interface is automatically added to your template. Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance. Select existing security group Create security group Security groups Info Compare security Select security groups . group rules al security-group-lb-asg VPC: vpc-07 lae984eaa589e75 sg-03c131377be591833

sg-Oddbabcc275da4f2c

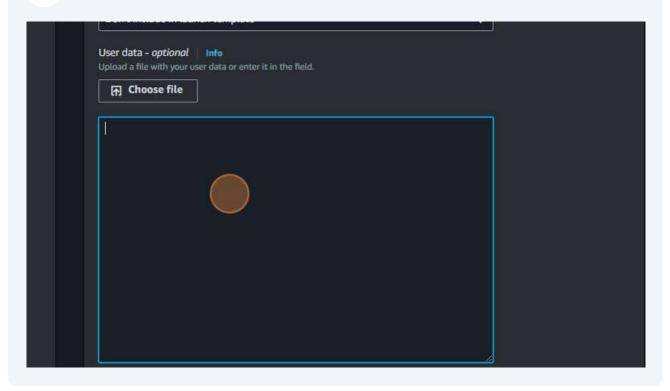


launch-wizard-6
VPC: vpc-071ae984eaa589e75

Feedback

CloudShell

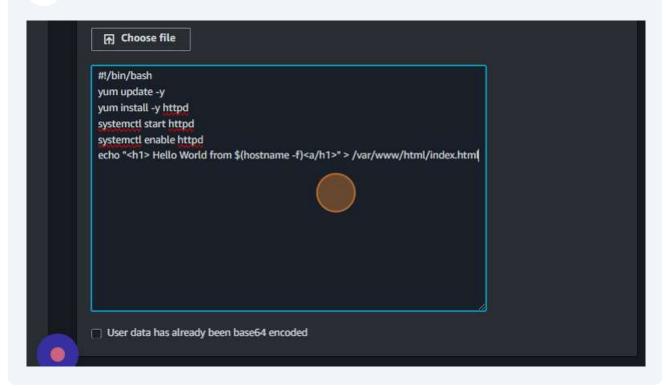
81 Click the "User data - optional" field.

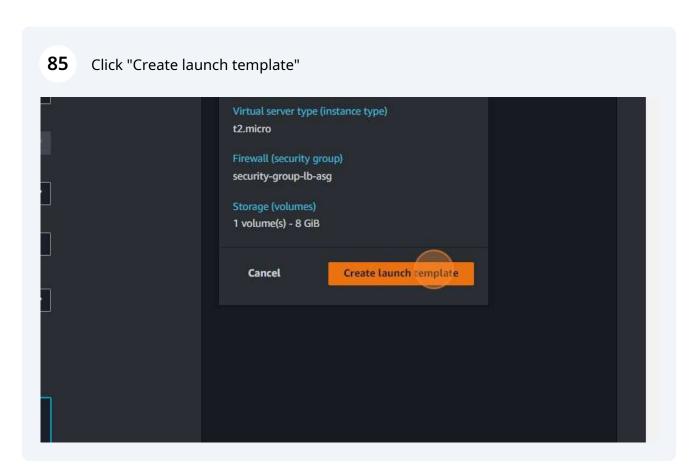


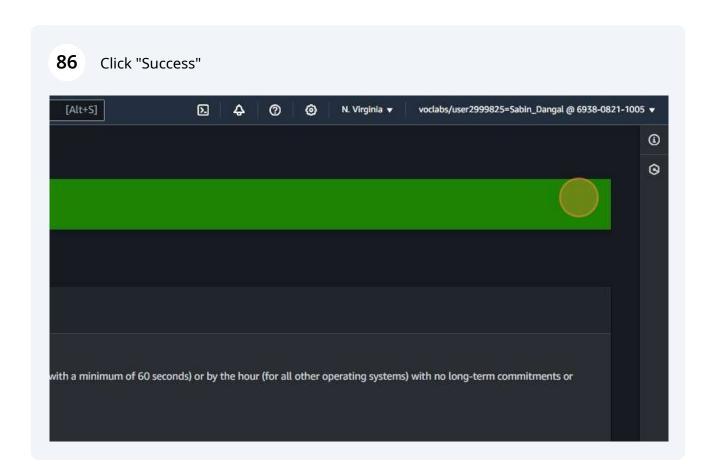
82 Press ctrl + v

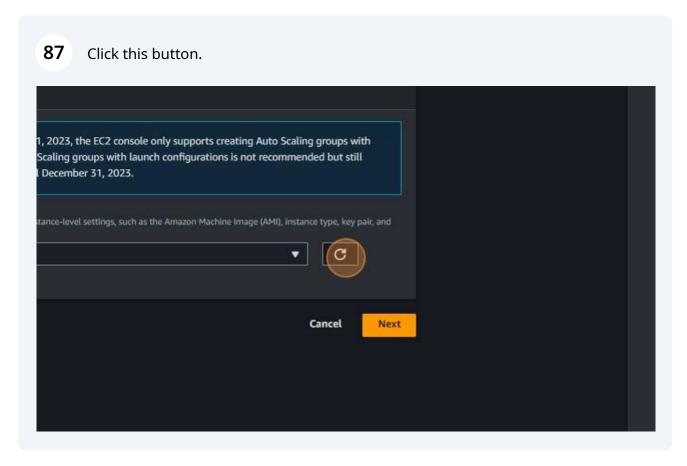
83 Press ctrl + v

84 Click the "User data - optional" field.

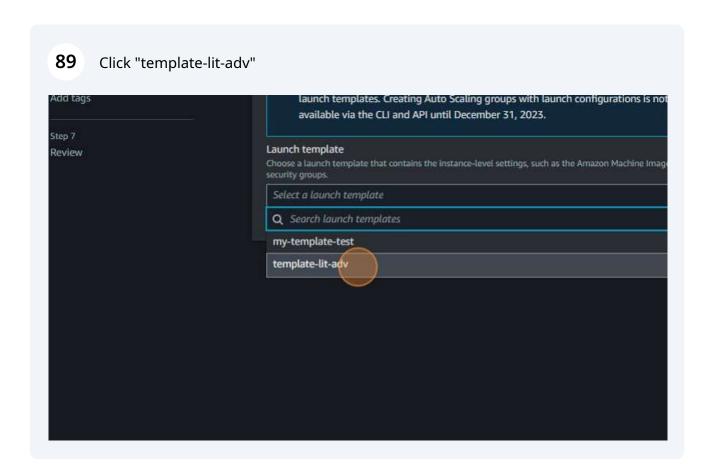




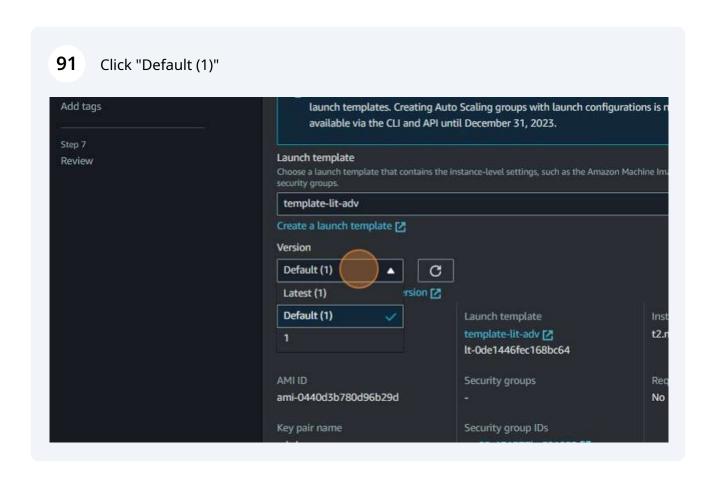




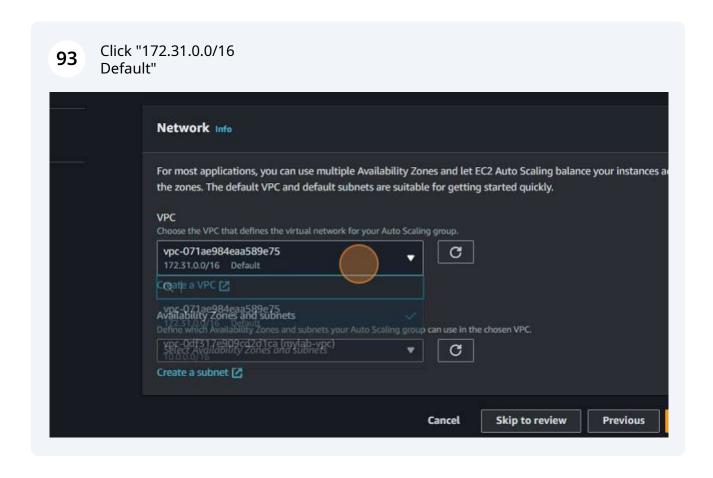
# Click "Select a launch template" Launch template Info (i) For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023. Launch template Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups. Select a launch template Cancel Next

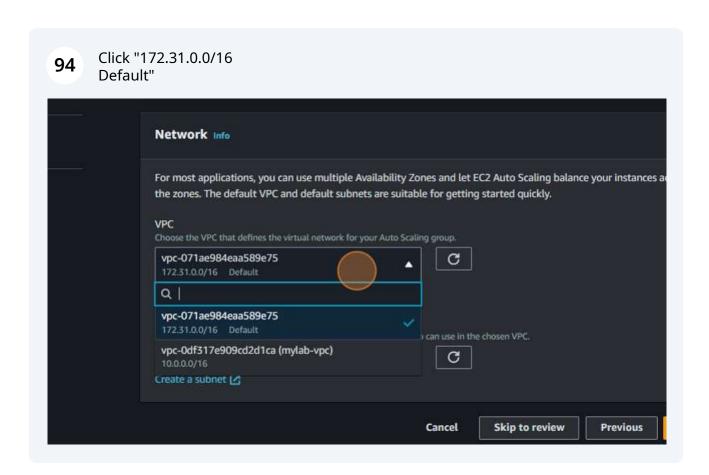


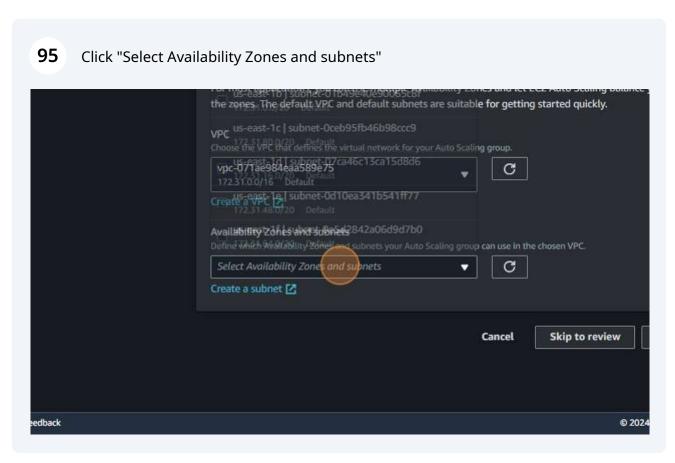
### 90 Click "Default (1)" Add tags launch templates. Creating Auto Scaling groups with launch configurations is n available via the CLI and API until December 31, 2023. Step 7 Launch template Review Choose a launch template that contains the instance-level settings, such as the Amazon Machine Imsecurity groups template-lit-adv Create a launch template [2] Version Default (1) C Create p(b)unch template version [2] Diefauttda) Launch template Inst template-lit-adv [2] t2.n lt-0de1446fec168bc64 AMI ID Security groups Rec ami-0440d3b780d96b29d No Security group IDs Key pair name



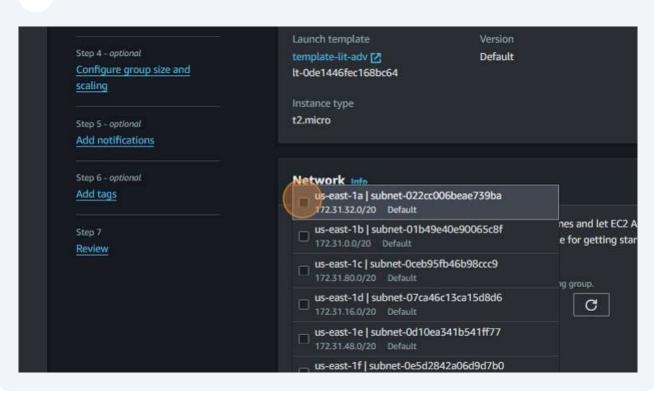
### 92 Click "Next" Launch template Instance type template-lit-adv [2] t2.micro lt-0de1446fec168bc64 Security groups Request Spot Instances Security group IDs sg-03c131377be591833 🛂 Date created Wed Feb 21 2024 00:46:42 GMT+0545 (Nepal Time) Cancel Next © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences



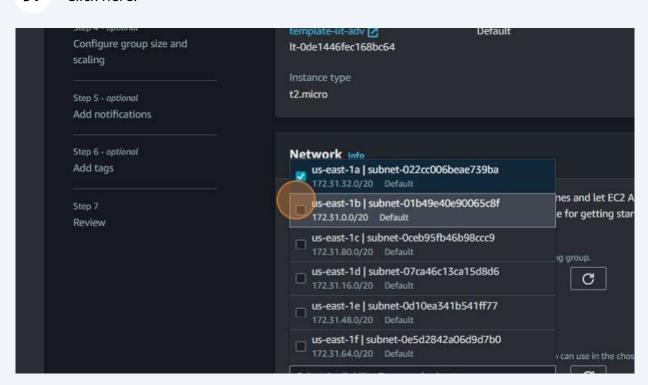




### 96 Click here.



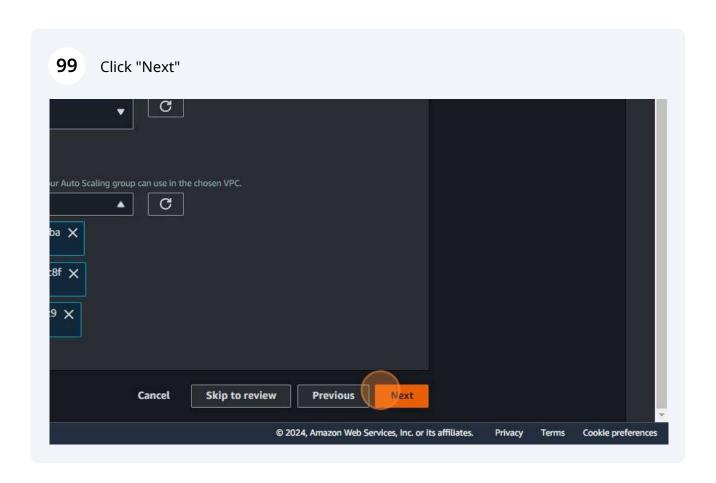
### **97** Click here.



### 98 Click here. Instance type t2.micro Step 5 - optional Add notifications Step 6 - optional Network Info Add tags us-east-1a | subnet-022cc006beae739ba nes and let EC2 A us-east-1b | subnet-01b49e40e90065c8f 172.31.0.0/20 Default e for getting star Review us-east-1c | subnet-Oceb95fb46b98ccc9 172.31.80.0/20 Default ig group. ☐ us-east-1d | subnet-07ca46c13ca15d8d6 172.31.16.0/20 Default C us-east-1e | subnet-0d10ea341b541ff77 us-east-1f | subnet-0e5d2842a06d9d7b0 172.31.64.0/20 Default can use in the chos

Select Availability Zones and subnets

us-east-1a | subnet-022cc006beae739ba X

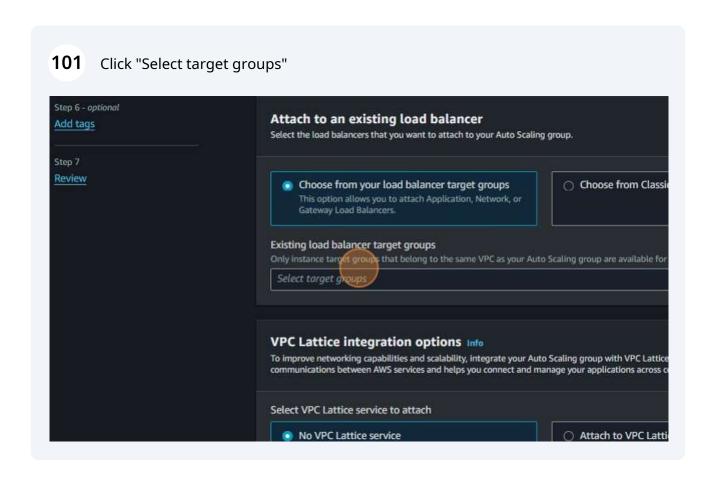


C

•

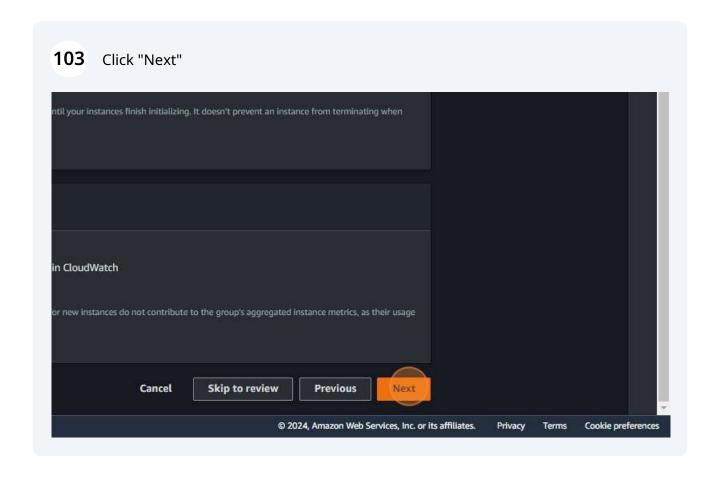
### **100** Click "Attach to an existing load balancer" Integrate your Auto Scaling group with other services to distribute network traffic across multiple servers using a load balancer or to establish service-to-service communications using VPC Lattice. You can also set options that give you more control over health check replacements and monitoring. Load balancing Info Use the options below to attach your Auto Scaling group to an existing load balancer, or to a new load balancer that you define. Attach to an existing load No load balancer Attach to a new load Traffic to your Auto Scaling group balancer balancer will not be fronted by a load Choose from your existing load Quickly create a basic load balancer. balancers. balancer to attach to your Auto Scaling group.

To improve networking capabilities and scalability, integrate your Auto Scaling group with VPC Lattice. VPC Lattice facilitates communications between AWS services and helps you connect and manage your applications across compute services in AWS.

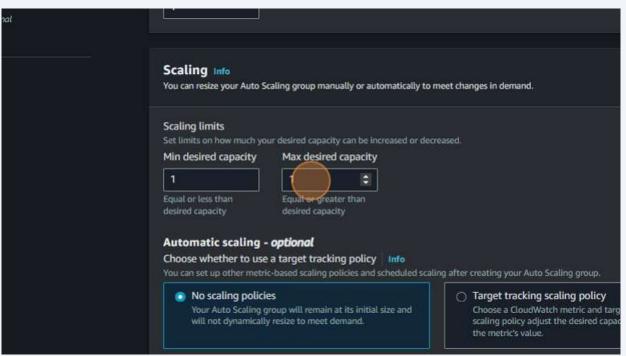


VPC Lattice integration options Info

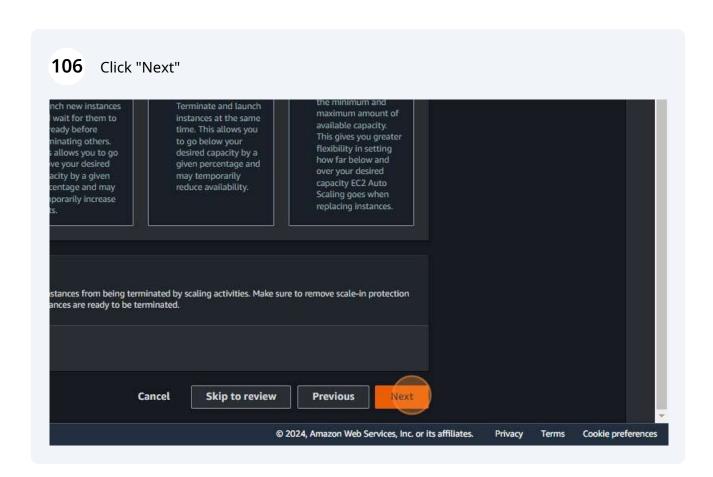
### 102 Click here. This option allows you to attach Application, Network, or Gateway Load Balancers. Existing load balancer target groups Only instance target groups that belong to the same VPC as your Auto Scaling group are Select target groups Q lit-adv-test-tg-grp | HTTP Load balancer: Not associated with any load balancer target-grp-adv | HTTP Application Load Balancer: load-balancer-adv Select VPC Lattice service to attach No VPC Lattice service ○ Attach VPC Lattice will not manage your Auto Scaling group's Incoming network access and connectivity with other services. target gr Create new VPC Lattice service [2]

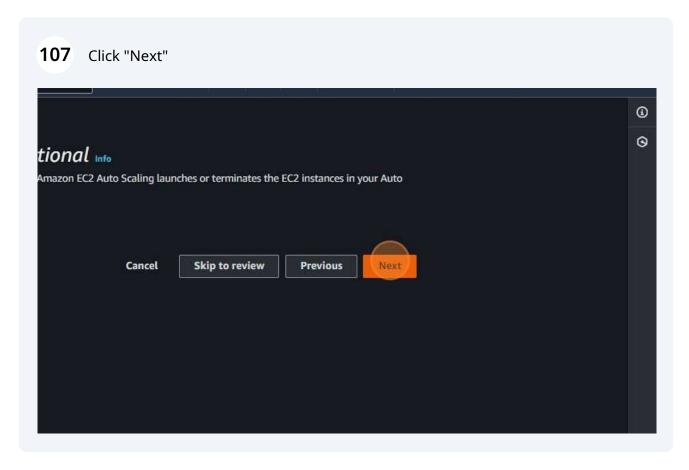


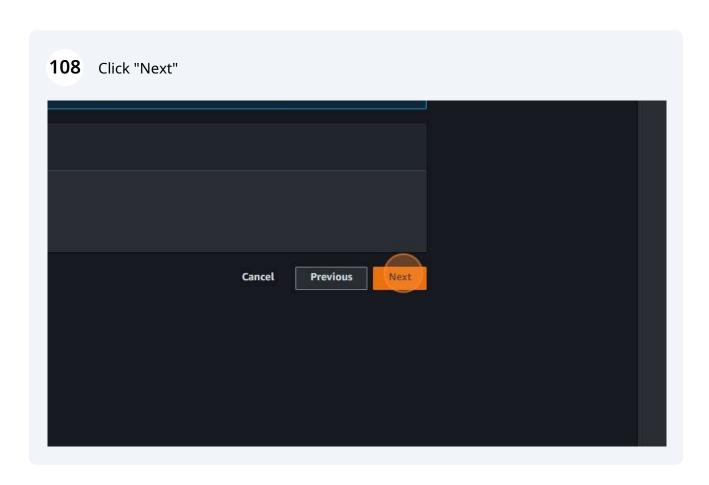
**104** Click the "Max desired capacity" field.

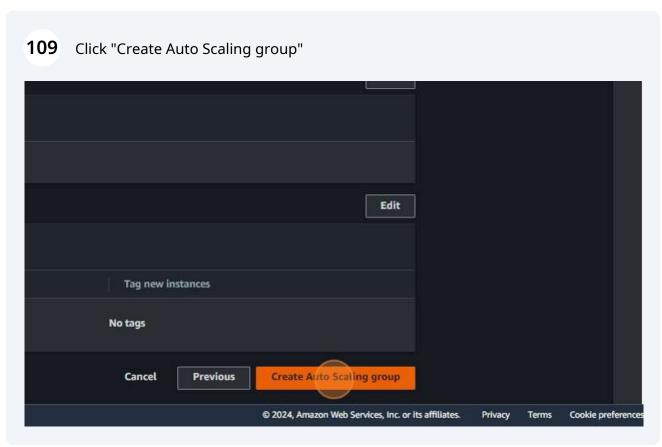


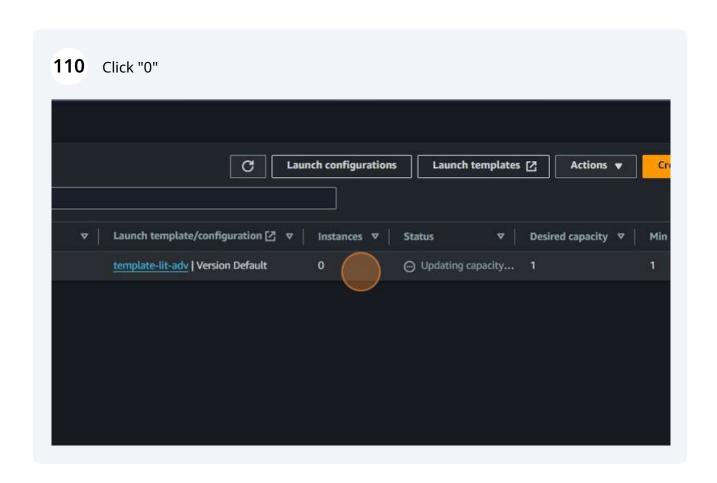
105 Type " Backspace 4"

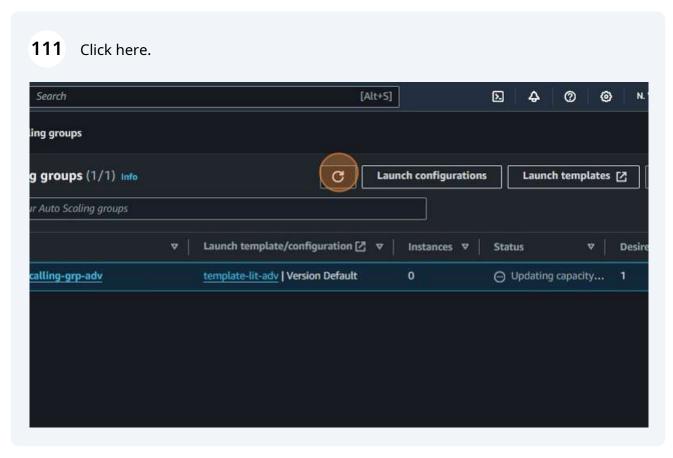




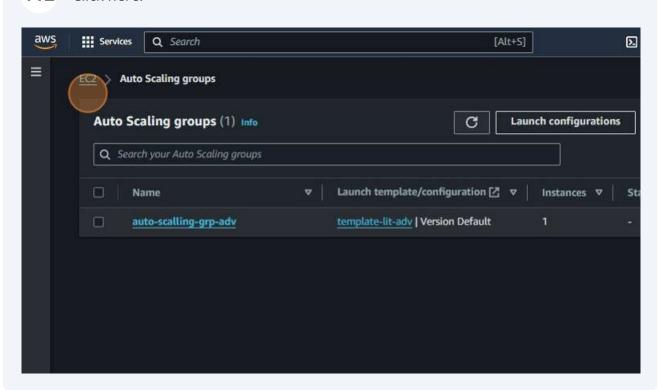




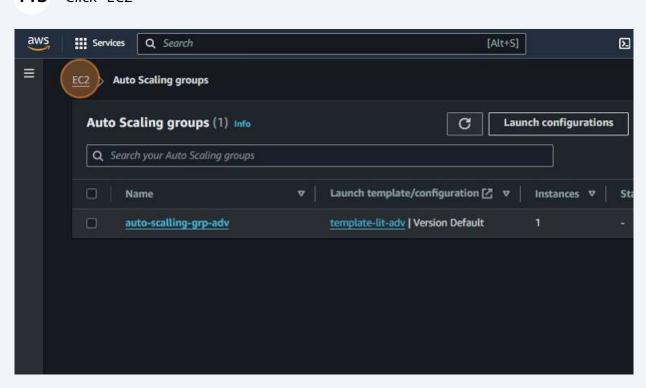




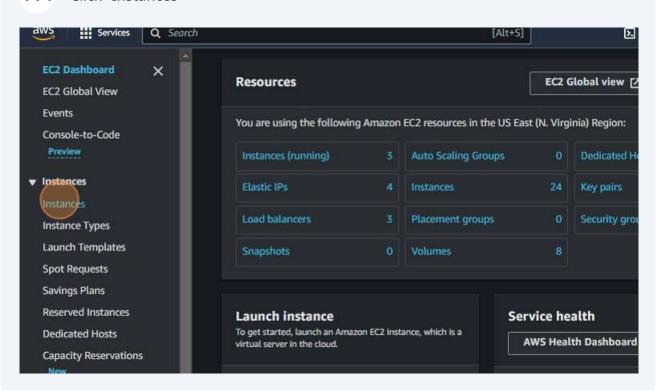
### 112 Click here.



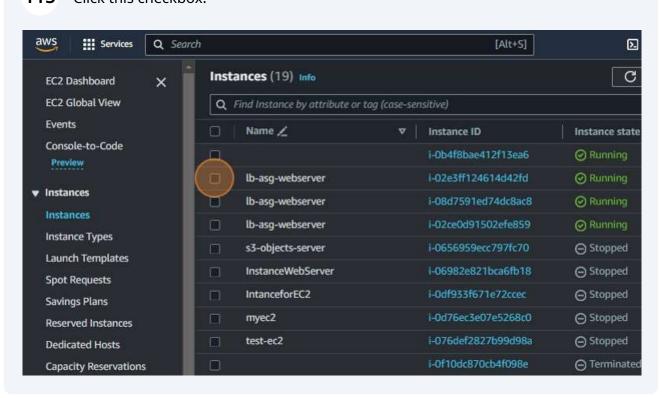
### **113** Click "EC2"



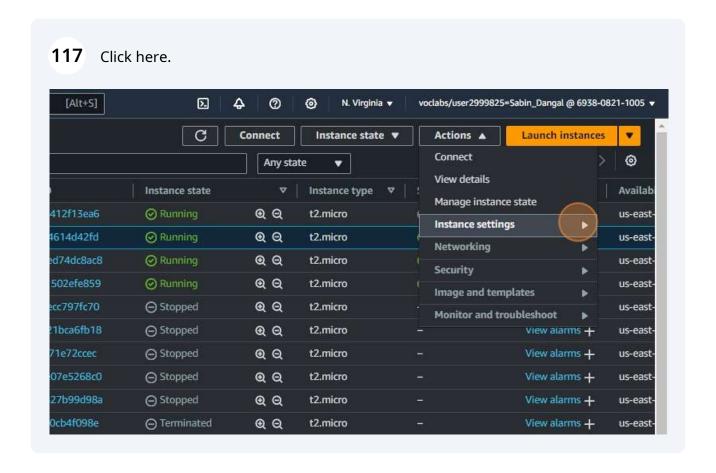
### 114 Click "Instances"



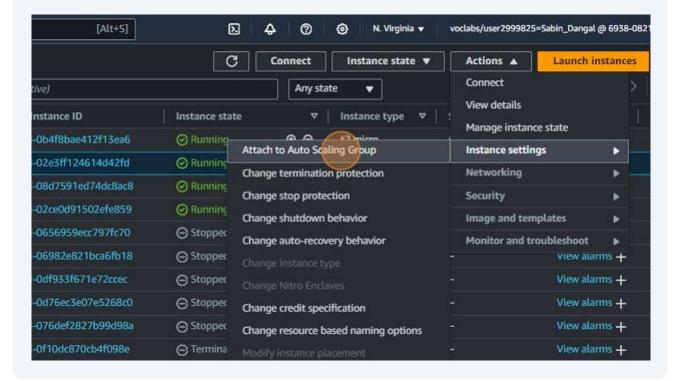
### 115 Click this checkbox.



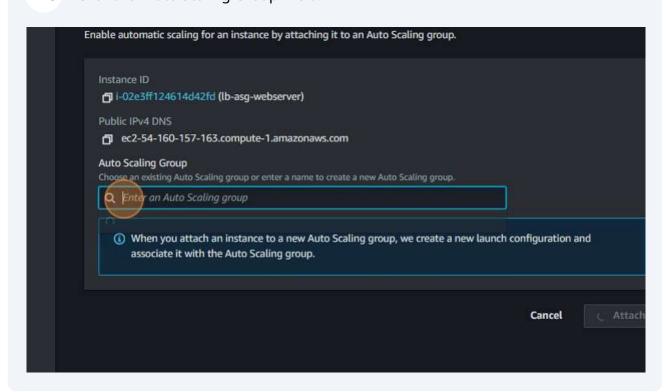
### 116 Click "Actions" [Alt+S] 2 4 @ 0 N. Virginia 🔻 voclabs/user2999825=Sabin\_Dangal @ 6938-0821-1005 ▼ C Instance state ▼ Actions w Connect Launch instances 0 Any state ۳ Instance state Instance type Status check Alarm status Availab 412f13ea6 (C) Running @ Q Initializing View alarms + t2.micro us-east-4614d42fd **⊘** Running Q Q t2.micro us-eastd74dc8ac8 Running @ @ Ø 2/2 checks passed View alarms + t2.micro us-east-502efe859 ② 2/2 checks passed View alarms + Running Q Q t2.micro us-eastecc797fc70 Q Q t2.micro View alarms + us-east-1bca6fb18 Stopped @ @ t2.micro View alarms + us-east-71e72ccec Stopped @ Q View alarms + t2.micro us-east- ⊖ Stopped 07e5268c0 @ @ t2.micro View alarms + us-east-27b99d98a Stopped @ Q t2.micro View alarms + us-east-Ocb4f098e Terminated @ Q t2.micro View alarms + us-east

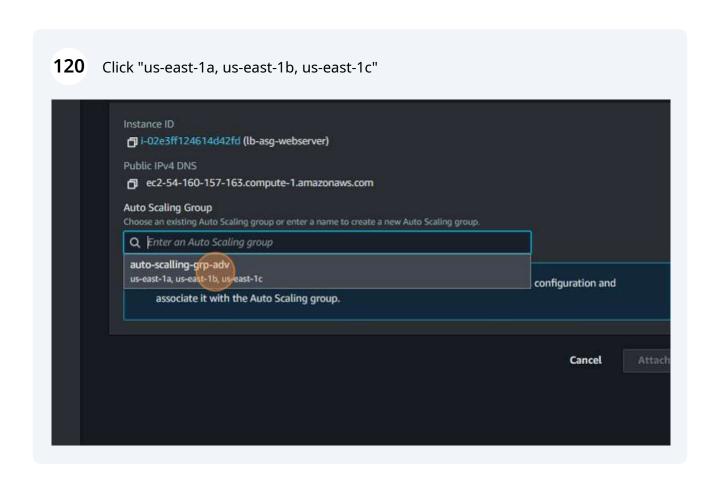


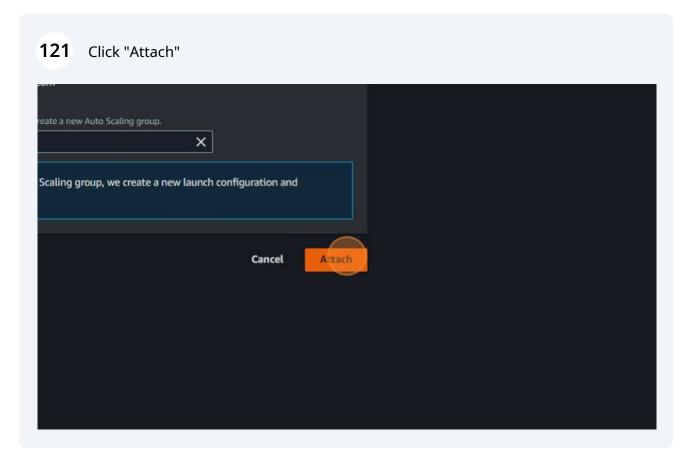
### 118 Click "Attach to Auto Scaling Group"



### 119 Click the "Auto Scaling Group" field.

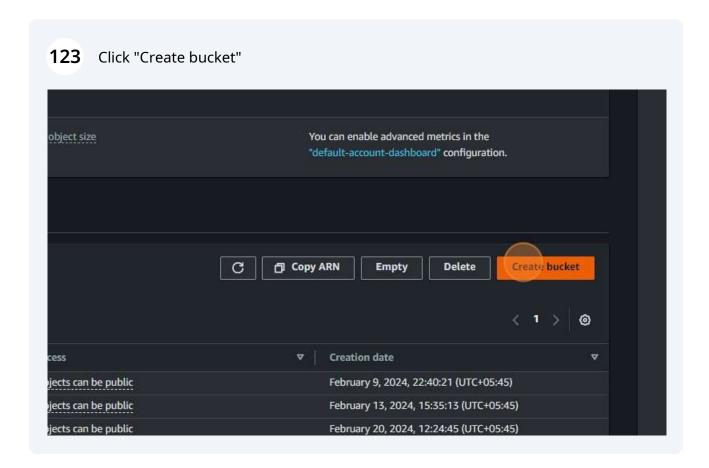




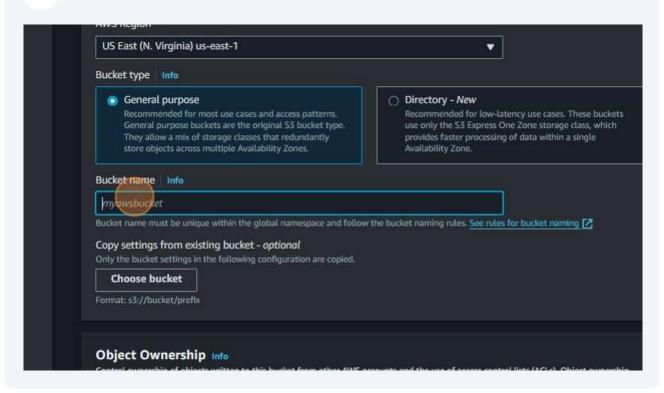


### **Hosting a Static Portfolio Website on S3**

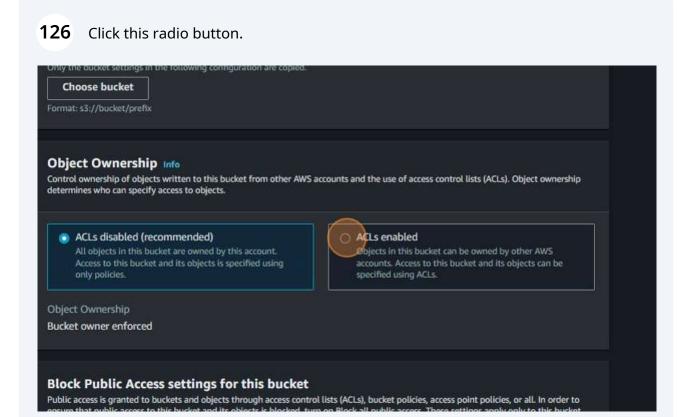
Navigate to <a href="https://s3.console.aws.amazon.com/s3/buckets?region=us-east-1&bucketType=general&region=us-east-1">https://s3.console.aws.amazon.com/s3/buckets?region=us-east-1&bucketType=general&region=us-east-1</a>



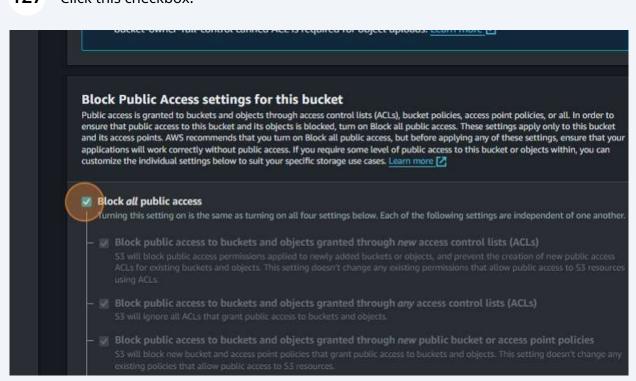
124 Click the "Bucket name" field.



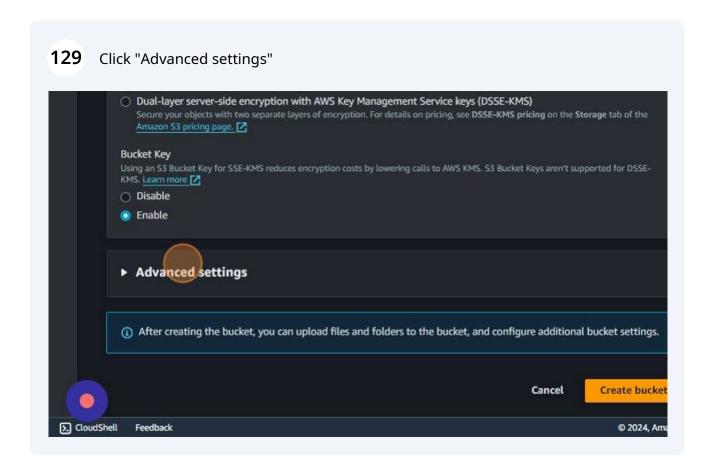
**125** Type "static-website-s3-bucket-global"



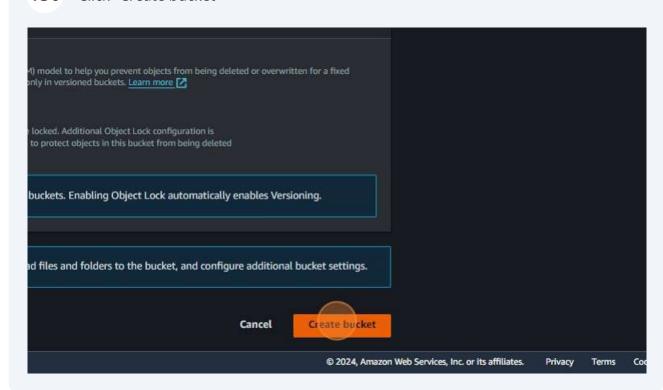
### Click this checkbox.



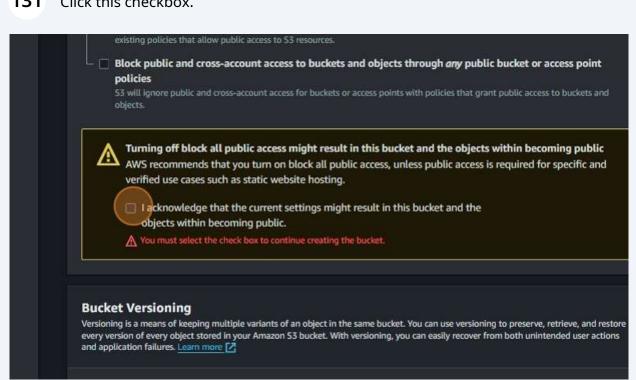
128 Switch to tab "How to host static website on S3 [Step-by-Step] | GoLinuxCloud"



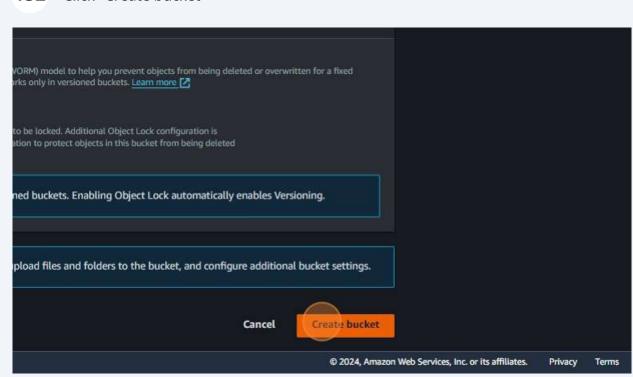
### 130 Click "Create bucket"



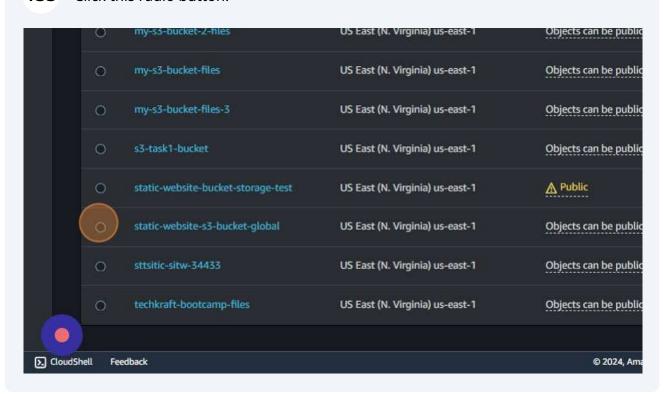
### **131** Click this checkbox.



### 132 Click "Create bucket"

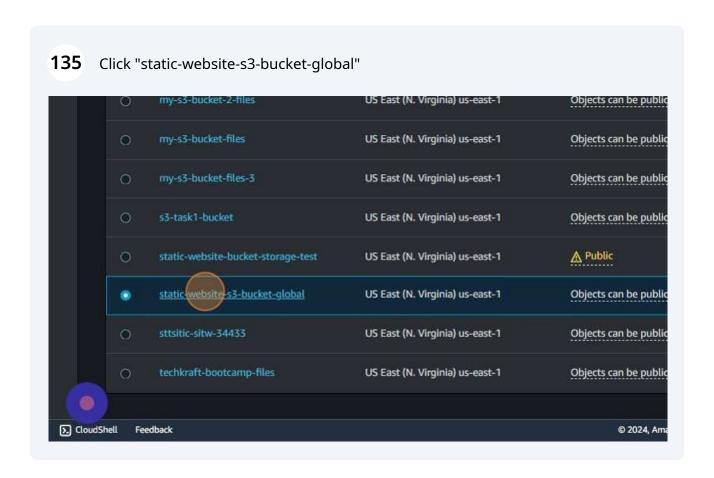


### 133 Click this radio button.



### Itional bucket settings, choose View details. Duckets C C Copy ARN Empty Delete Create bucket A AWS Region V Access V Creation date US East (N. Virginia) us-east-1 Objects can be public (UTC+05:45)

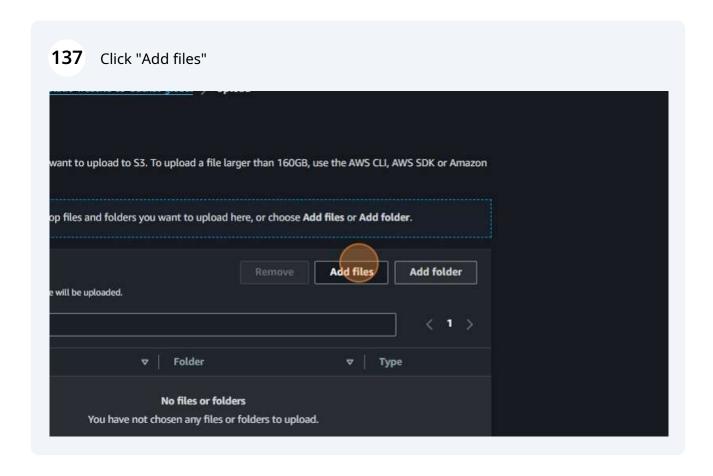
Objects can be public



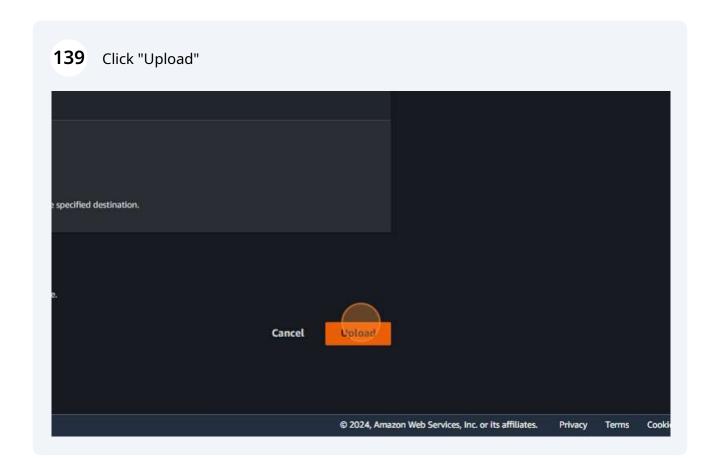
US East (N. Virginia) us-east-1

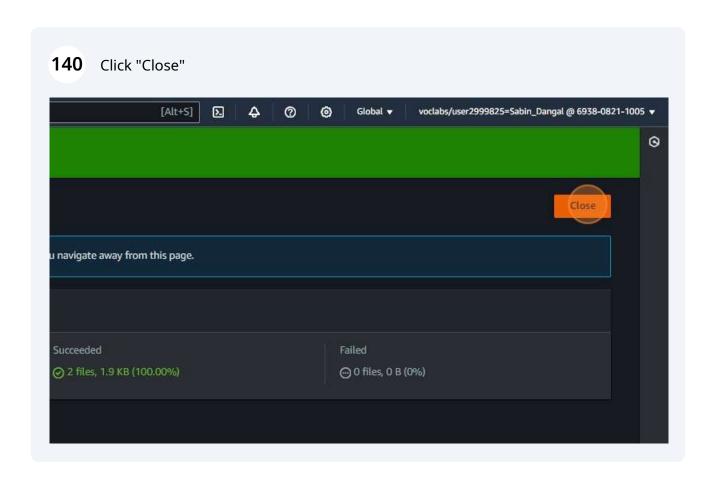
February 13, 2024, 15:35:13

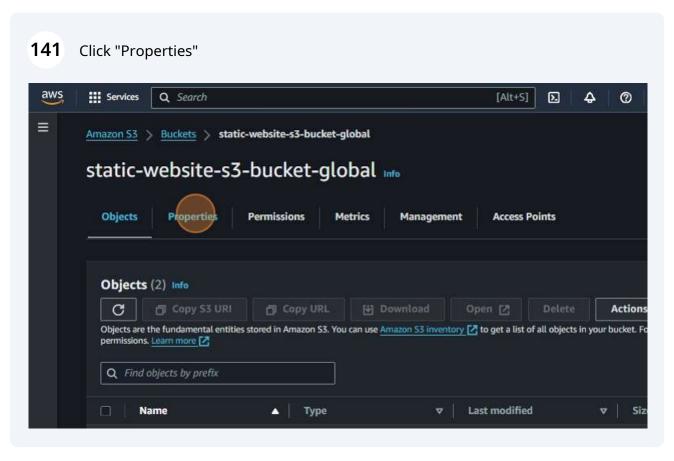
# mental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to prefix Type V | Last modified V | Size V | Ste No objects You don't have any objects in this bucket.



# And folders in this table will be uploaded. If d by name V Folder Type error.html index.html text/html index.html cation Info tion tic-website-s3-bucket-global sination details et settings that impact new objects stored in the specified destination.

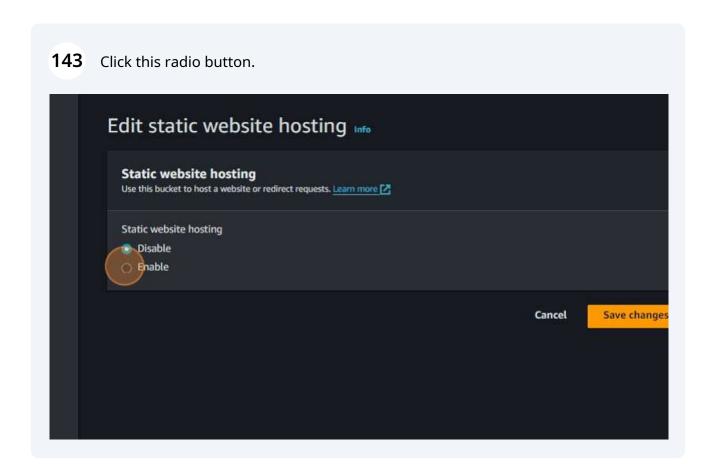






### 142 Click "Edit" Indianonymous access to this bucket is disabled. Learn more ☑ Edit Edit

© 2024, Amazon Web Services, Inc. or its affiliates.



Cookie preferences

Privacy

Terms

Click the "Index document" field.

Redirect requests for an object
Redirect requests to another bucket or domain. Learn more 

The property of the second of

145 Type "undex.html"

readable. To do so, you can edit the 53 Block Public Access settings for the bucket. For more information, see

Using Amazon S3 Block Public Access

Index document
Specify the home or default page of the website.

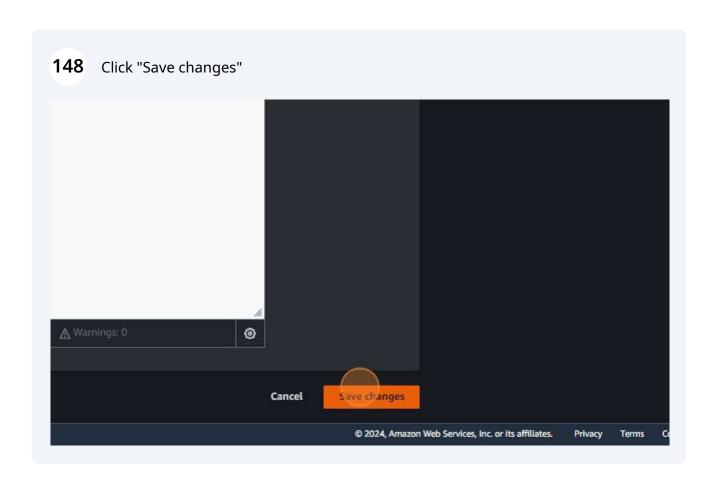
Index.html

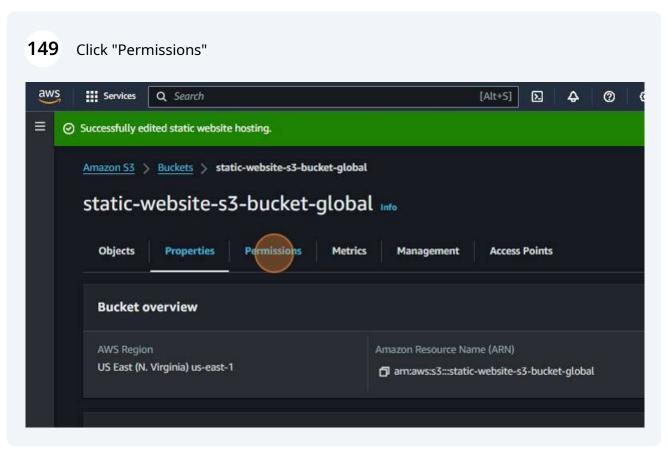
Error document - optional
This is returned when an error occurs.

Index.html

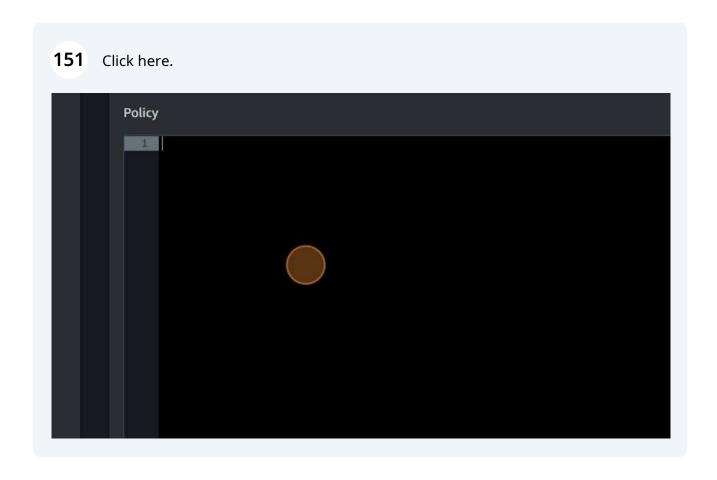
Redirection rules - optional
Redirection rules, written in JSON, automatically redirect webpage requests for specific content. Learn more

**147** Type "error.html"





### nd its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific in the bucket. Bucket policies don't apply to objects owned by other accounts. Learn more Copy



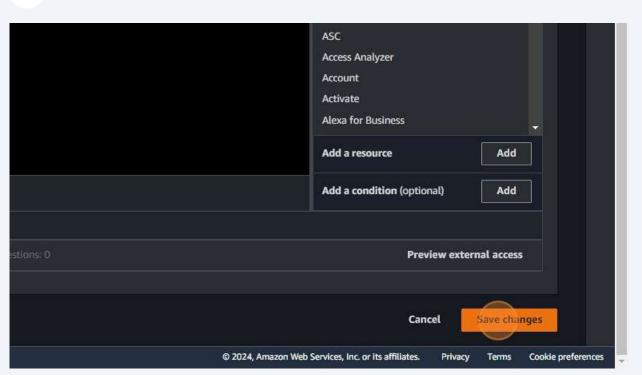
**152** Press **ctrl** + **v** 

### 153 Click here.

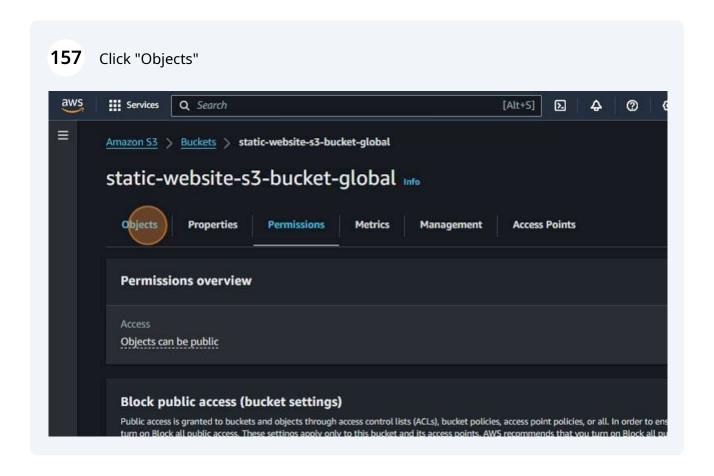
### **154** Double-click here.

```
Edit statement
sion": "2012-10-17",
                                                                                                                    Stmt1708060129939
: "Policy1708060144485",
                                                                                                                    Add actions
                                                                                                                    Choose a service
    "Sid": "Stmt1708060129939",
    "Effect": "Allow",
"Principal": "*",
"Action": "s3:Getobject",
                                                                                                                     Q Filter services
                                                                                                                    Included
    "Resource": "arn:aws:s3:::static-website-bucket-storage-test/"
                                                                                                                    53
                                                                                                                    Available
                                                                                                                    AMP
                                                                                                                    API Gateway
                                                                                                                    API Gateway V2
                                                                                                                    ASC
                                                                                                                    Access Analyzer
```

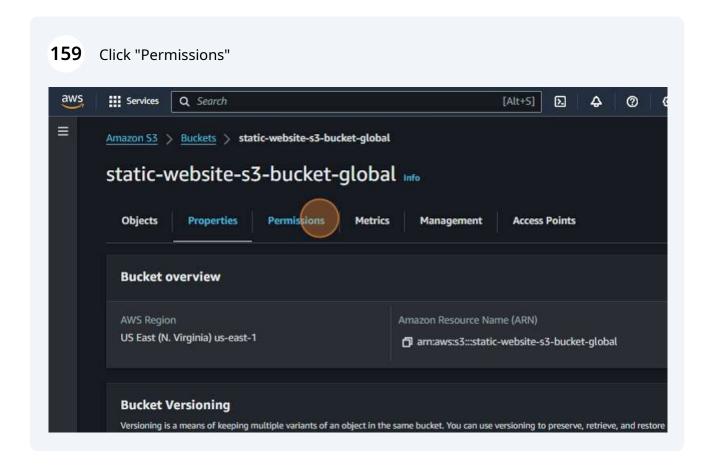
### 155 Click "Save changes"



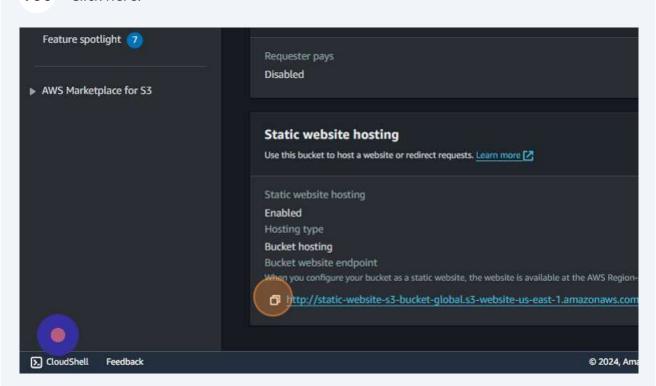
### 



### 158 Click "Properties" [Alt+S] Services Q Search 2 4 0 $\equiv$ Amazon 53 > Buckets > static-website-s3-bucket-global static-website-s3-bucket-global Info Objects **Properties** Permissions Metrics **Access Points** Management Objects (2) Info Actions Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory 🔀 to get a list of all objects in your bucket. Fo permissions. Learn more Q Find objects by prefix Last modified Siz Name Type



### 160 Click here.



In a new tab, navigate to <a href="http://static-website-s3-bucket-global.s3-website-us-east-1.amazonaws.com/">http://static-website-s3-bucket-global.s3-website-us-east-1.amazonaws.com/</a>

