

1- Launch a jump host Take a screenshot while you are ssh to the jumphost Also When you ssh from bastion to the private machine Screenshot from the console showing the instances Ips

The screenshot shows the AWS Management Console for the 'us-east-1' region. The 'Launch Instance' button is visible at the top. Below it, a table lists two instances: 'private-server' and 'public-host'. The 'private-server' instance is selected, and its details are shown in the 'Description' tab. The details include:

Instance ID	Instance state	Public DNS (IPv4)
i-05ea6f74f03825e1a	running	-
Instance type	Private DNS	IPv4 Public IP
t2.micro	ip-10-0-0-25.ec2.internal	-
Finding	Private IPs	IPv6 IPs
Opt-in to AWS Compute Optimizer for recommendations. Learn more	10.0.0.25	-
Availability zone	Scheduled events	Elastic IPs
us-east-1f	No scheduled events	-
Security groups	AMI ID	-
bastion , view inbound rules , view outbound rules	ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20221206 (ami-	
Secondary private IPs	-	-
VPC ID	-	-
vpc-0a2461066fda56200 (lab3-vpc)	-	-

```
ubuntu@ip-10-0-0-14:~$ ssh -i "EC2 key.pem" ubuntu@10.0.0.25
The authenticity of host '10.0.0.25 (10.0.0.25)' can't be established.
ED25519 key fingerprint is SHA256:cMR6LTJs32lg5CKktsY6jSFLaje0imm1T8IdMRRWmdQ.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.0.25' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1026-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Thu Jan  5 19:14:48 UTC 2023

System load:  0.0          Processes:    97
Usage of /:   19.7% of 7.57GB Users logged in:  0
Memory usage: 20%         IPv4 address for eth0: 10.0.0.25
Swap usage:   0%

0 updates can be applied immediately.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

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.

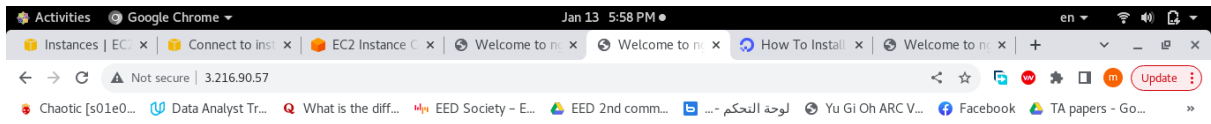
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-0-25:~$
```

The top screenshot shows a terminal window on an Ubuntu 22.04.1 LTS system. It displays the output of an SSH connection from a local host to a remote instance. The terminal shows the SSH command, the host's fingerprint, and the user's confirmation to connect. It also displays system information such as system load, processes, and memory usage.

The bottom screenshot shows the AWS Management Console. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, and Instances. The main content area shows a list of EC2 instances. The instance 'public-host' (ID: i-0bee0cfb22785b650) is highlighted, showing its status as 'running' and its public IP address as 3.236.147.50. The instance details panel shows various attributes including Instance ID, Instance state, Instance type, Private DNS, Private IPs, and VPC ID.

2- Implement the below diagram then take a screenshot while you put dns of the load balancer into the browser and it returns a response from the 2 apache instances Also Screenshot from the console showing the machines BE WS have private Ips And finally a screenshot showing the targets of the 2 loadbalancers target groups are healthy

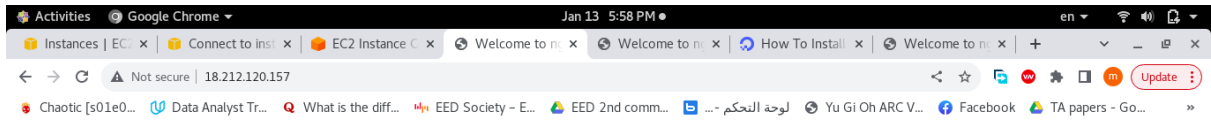


Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

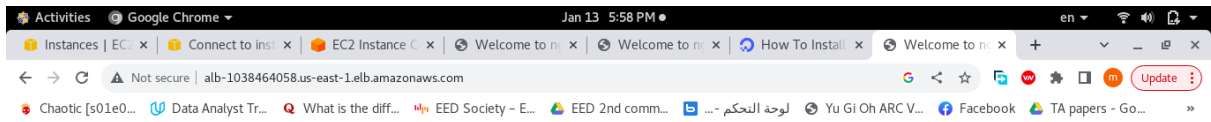


Welcome to nginx!

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Commercial support is available at nginx.com.

Thank you for using nginx.

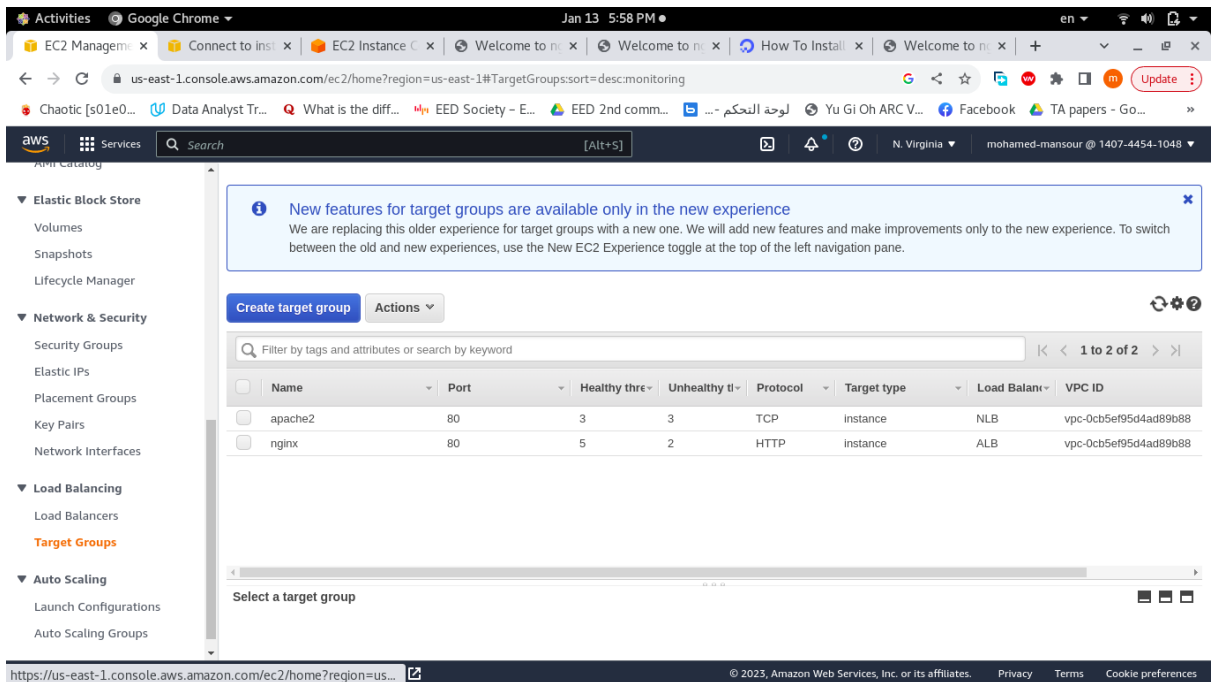


Welcome to nginx!

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Commercial support is available at nginx.com.

Thank you for using nginx.



ActivitiesGoogle ChromeJan 13 5:58 PMen

EC2 Managem...Connect to ins...EC2 Instance...Welcome to n...Welcome to n...How To Install...Welcome to n...+

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalancers:sort=desc:HealthCheck

Chaotic [s01e0...Data Analyst Tr...What is the diff...EED Society - E...EED 2nd comm...لوحة التحكمYu Gi Oh ARC V...FacebookTA papers - Go...

awsServicesSearch[Alt+S]

Ami catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

Load Balancing

Load Balancers

Target Groups

Auto Scaling

Launch Configurations

Auto Scaling Groups

Create Load BalancerActions

Filter by tags and attributes or search by keyword1 to 2 of 2

	Name	DNS name	State	VPC ID	Availability Zones	Type
<input type="checkbox"/>	NLB	NLB-6d02e7378170574a.elb...	Active	vpc-0cb5ef95d4ad89b88	us-east-1a, us-east-1b	network
<input checked="" type="checkbox"/>	ALB	ALB-1038464058.us-east-1....	Active	vpc-0cb5ef95d4ad89b88	us-east-1b, us-east-1a	application

Load balancer: ALB

DescriptionListenersMonitoringIntegrated servicesTags

Basic Configuration

Name	ALB
ARN	arn:aws:elasticloadbalancing:us-east-1:140744541048:loadbalancer/app/ALB/e69af4c538f3c3bd
DNS name	ALB-1038464058.us-east-1.elb.amazonaws.com (A Record)
State	Active
Type	application

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalancers:© 2023, Amazon Web Services, Inc. or its affiliates. PrivacyTermsCookie preferences

Activities Google Chrome Jan 13 5:58 PM en

Instances | EC2 | Connect to inst... | EC2 Instance C... | Welcome to n... | Welcome to n... | How To Install... | Welcome to n... | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#instances:

Chaotic [s01e0... | Data Analyst Tr... | What is the diff... | EED Society - E... | EED 2nd comm... | ...- لوحة التحكم | Yu Gi Oh ARC V... | Facebook | TA papers - Go...

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EC2 Dashboard
EC2 Global View
Events
Tags
Limits

▼ Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations

Instances (5) Info

Find Instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	apache_a1	i-0a0f49ef16f26c411	Terminated	t2.micro	-	No alarms	us-east-1a
<input type="checkbox"/>	nginx_a1	i-044d92b16b6354b49	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	apache_a1	i-07c2dffdea03ff3d7	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	apache_b1	i-08702abd4de903034	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b
<input type="checkbox"/>	nginx_b1	i-07b5e1d2ffe178182	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b

Select an instance

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Activities Google Chrome Jan 13 6:00 PM en

VPC Management | Connect to inst... | EC2 Instance C... | Welcome to n... | Welcome to n... | How To Install... | Welcome to n... | +

us-east-1.console.aws.amazon.com/vpc/home?region=us-east-1#subnets:search=vpc-0cb5ef95d4ad89b88

Chaotic [s01e0... | Data Analyst Tr... | What is the diff... | EED Society - E... | EED 2nd comm... | ...- لوحة التحكم | Yu Gi Oh ARC V... | Facebook | TA papers - Go...

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Filter by VPC:
Select a VPC
vpc-0cb5ef95d4ad89b88 MY_VPC Owner: 140744541048

Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
Carrier gateways
DHCP option sets
Elastic IPs
Managed prefix lists
Endpoints
Endpoint services

Subnets (4) Info

Filter subnets
search: vpc-0cb5ef95d4ad89b88 Clear filters

	Name	Subnet ID	State	VPC	IPv4 CIDR
<input type="checkbox"/>	private_1b	subnet-07e8edc3e3a6162ce	Available	vpc-0cb5ef95d4ad89b88 MY...	10.0.3.0/24
<input type="checkbox"/>	public_1b	subnet-024b86b8a85518cbf	Available	vpc-0cb5ef95d4ad89b88 MY...	10.0.2.0/24
<input type="checkbox"/>	public_1a	subnet-02865c3e462133919	Available	vpc-0cb5ef95d4ad89b88 MY...	10.0.0.0/24
<input type="checkbox"/>	private_1a	subnet-079b8047eb1ad9f96	Available	vpc-0cb5ef95d4ad89b88 MY...	10.0.1.0/24

Select a subnet

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