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Execution Steps

1. [Manually] Create S3 bucket with name myapp-6291-7066-6893-demo

2. [AWS CLI] Upload myApp.zip includes data of {index.html , me.jpg}

```
aws s3 cp .\myApp.zip s3://myapp-6291-7066-6893-demo/
```

3. [Manually] Create keypair "myAppNVirginiaEC2KP.pem" to be used in EC2 instances in CF template && "jumbbox-key.pem" for Bastion Host

4. Run CF template

```
aws cloudformation create-stack --stack-name myWebApp --region us-east-1 --template-body
file://networkandserver.yml --parameters file://networkandserver.json --capabilities "CAPABILITY_IAM"
"CAPABILITY_NAMED_IAM"
```

```
aws cloudformation update-stack --stack-name myWebApp --region us-east-1 --template-body
file://networkandserver.yml --parameters file://networkandserver.json --capabilities "CAPABILITY_IAM"
"CAPABILITY_NAMED_IAM"
```

```
aws cloudformation delete-stack --stack-name myWebApp --region us-east-1
```

5. [Manually] Create Bastion Host in a public subnet.

ServerSpecs:

Amazon Linux 2 AMI (HVM), SSD Volume Type

t2.micro

myAppVPC

publicsubnet

Auto Assign public IP

Storage:

8 GB

Tags:

Name=JumbBox

SG:

Name=JumbBox-SG

Inbound Rules= Allow SSH on port 22, Source=MY IP, Description=Administrator Access

Keypair:

jumbbox-key.pem

6. Connect to jumbbox and verify connection to EC2 instances

```
ssh -i "jumbbox-key.pem" ec2-user@<JumbBox PublicIP> #just to check ssh connection
```

```
scp -i "jumbbox-key.pem" myAppNVirginiaEC2KP.pem ec2-uer@<JumbBox PublicIP>:/home/ec2-user/myAppNVirginiaEC2KP.pem #copy from host machine to jumbbox server
```

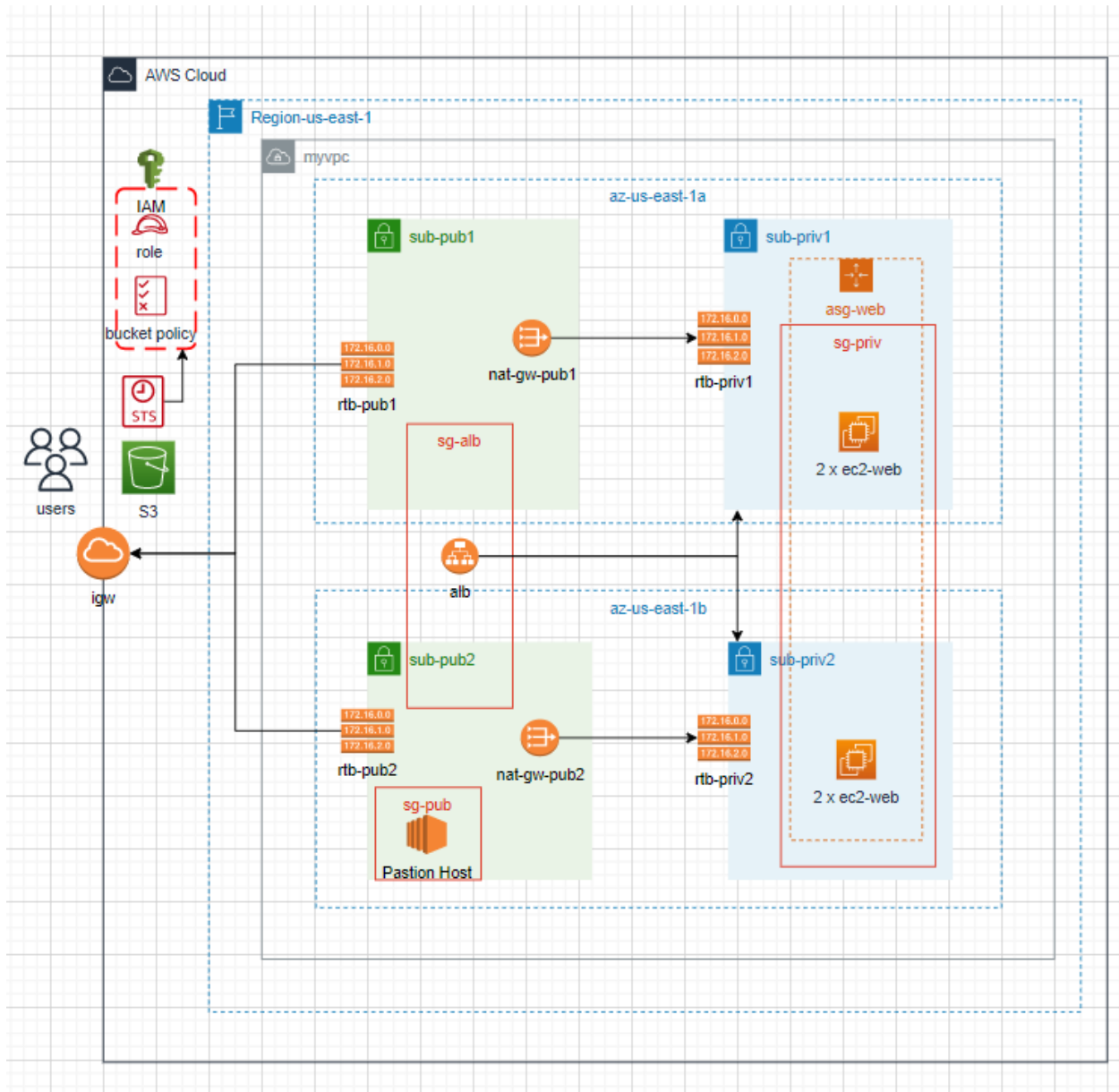
```
ssh -i "jumbbox-key.pem" ec2-user@<JumbBox PublicIP>
```

```
ls
```

```
chmod 400 myAppNVirginiaEC2KP.pem
```

```
ssh -i "myAppNVirginiaEC2KP.pem" ubuntu@<EC2-PrivateIP>
```

Schematic Design



Keypairs

Key pairs (4) [Info](#)

Filter key pairs

<input type="checkbox"/>	Name	Type	Fingerprint	ID
<input type="checkbox"/>	egfwd-aws-1	rsa	bcb5:5b:c4:9d:dd:6c:25:75:4c:14:03:8...	key-064b0ada10e4af624
<input type="checkbox"/>	jumbbox-key	rsa	b7:62:80:6b:82:5b:ac:01:80:7d:05:02:3...	key-095c1da37c4a4ff82
<input type="checkbox"/>	myAppNVirginiaEC2KP	rsa	d9:6a:84:f5:93:38:59:33:ac:94:e6:5b:1...	key-0fb9111d0f2ff4972
<input type="checkbox"/>	vockey	rsa	d2:c7:91:0b:b1:99:9b:8b:cd:24:35:12:f...	key-00c5a26f18a86770c

S3 Bucket

Amazon S3 > Buckets > myapp-6291-7066-6893-demo

myapp-6291-7066-6893-demo [Info](#)

[Objects](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Objects (1)

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. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

<input checked="" type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input checked="" type="checkbox"/>	myApp.zip	zip	April 1, 2022, 15:21:50 (UTC+02:00)	25.6 KB	Standard

Running CF template

```
PS C:\Users\mohamed.mekawy\Desktop\Data\Udacity\EgFwdAWS\MohamedMekawy-p2\Deploy-a-High-Availability-Web-App-Using-CloudFormation> aws cloudformation create-stack --stack-name myWebApp --region us-east-1 --template-body file://networkandserver.yml --parameters file://networkandserver.json --capabilities "CAPABILITY_IAM" "CAPABILITY_NAMED_IAM" { "StackId": "arn:aws:cloudformation:us-east-1:629170666893:stack/myWebApp/af3e3a00-b1c4-11ec-a953-0aa581200257" }
```

CloudFormation Stack

CloudFormation > Stacks

Stacks (1)

☒ View nested [Active](#)

Stack name	Status	Created time	Description
myWebApp	CREATE_COMPLETE	2022-04-01 16:04:45 UTC+0200	Mohamed Mekawy Emam / Udagaram Project

Stack Info

CloudFormation > Stacks > myWebApp

Stacks (1)

☒ View nested [Active](#)

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

[Delete](#) [Update](#) [Stack actions](#) [Create stack](#)

[Stack info](#) | [Events](#) | [Resources](#) | [Outputs](#) | [Parameters](#) | [Template](#) | [Change sets](#)

Overview

Stack ID	arn:aws:cloudformation:us-east-1:629170666893:stack/myWebApp/af3e3a00-b1c4-11ec-a953-0aa581200257	Description	Mohamed Mekawy Emam / Udagaram Project
Status	CREATE_COMPLETE	Status reason	-
Root stack	-	Parent stack	-
Created time	2022-04-01 16:04:45 UTC+0200	Deleted time	-
Updated time	-		
Drift status	NOT_CHECKED	Last drift check time	-
Termination protection	Disabled	IAM role	-

Stack Events

CloudFormation > Stacks > myWebApp

Stacks (1)

Filter by stack name

Active View nested

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

Stack info Events Resources Outputs Parameters Template Change sets

Events (98)

Search events

Timestamp	Logical ID	Status	Status reason
2022-04-01 16:08:41 UTC+0200	myWebApp	CREATE_COMPLETE	-
2022-04-01 16:08:38 UTC+0200	ALBListenerRule	CREATE_COMPLETE	-
2022-04-01 16:08:37 UTC+0200	ALBListenerRule	CREATE_IN_PROGRESS	Resource creation Initiated
2022-04-01 16:08:35 UTC+0200	ALBListenerRule	CREATE_IN_PROGRESS	-
2022-04-01 16:08:32 UTC+0200	Listener	CREATE_COMPLETE	-
2022-04-01 16:08:32 UTC+0200	Listener	CREATE_IN_PROGRESS	Resource creation Initiated
2022-04-01 16:08:28 UTC+0200	Listener	CREATE_IN_PROGRESS	-
2022-04-01 16:08:26 UTC+0200	WebAppLB	CREATE_COMPLETE	-
2022-04-01 16:08:12 UTC+0200	DefaultPrivateRoute1	CREATE_COMPLETE	-
2022-04-01 16:07:57 UTC+0200	DefaultPrivateRoute2	CREATE_COMPLETE	-
2022-04-01 16:07:56 UTC+0200	DefaultPrivateRoute1	CREATE_IN_PROGRESS	Resource creation Initiated
2022-04-01 16:07:55 UTC+0200	DefaultPrivateRoute1	CREATE_IN_PROGRESS	-
2022-04-01 16:07:53 UTC+0200	NatGateway1	CREATE_COMPLETE	-

Stack Resources

CloudFormation > Stacks > myWebApp

Stacks (1)

Filter by stack name

Active View nested

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

Stack info Events Resources Outputs Parameters Template Change sets

Resources (32)

Search resources

Logical ID	Physical ID	Type	Status	Status reason	Module
ALBListenerRule	arn:aws:elasticloadbalancing:us-east-1:629170666893:listener-rule/app/myWeb-WebApp-1GHE64CVUFOEL/1cc374b4a0da195c/3e1ae963dd023a17/085380ff1e8bb6c2	AWS:ElasticLoadBalancingV2::ListenerRule	CREATE_COMPLETE	-	-
DefaultPrivateRoute1	myWeb-Default-1K3MQG9DVJPQU	AWS::EC2::Route	CREATE_COMPLETE	-	-
DefaultPrivateRoute2	myWeb-Default-19GKFR6UHQKQC	AWS::EC2::Route	CREATE_COMPLETE	-	-
DefaultPublicRoute	myWeb-Default-B4MK2YD7QQ35	AWS::EC2::Route	CREATE_COMPLETE	-	-
InternetGateway	igw-0f228494e6d053fc7	AWS::EC2::InternetGateway	CREATE_COMPLETE	-	-
InternetGatewayAttachment	myWeb-Inter-K7R0R84XL7Y	AWS::EC2::VPCGatewayAttachment	CREATE_COMPLETE	-	-
Listener	arn:aws:elasticloadbalancing:us-east-1:629170666893:listener/app/myWeb-WebApp-1GHE64CVUFOEL/1cc374b4	AWS:ElasticLoadBalancingV2::Listener	CREATE_COMPLETE	-	-

Stack Outputs

CloudFormation > Stacks > myWebApp

Stacks (1)

Filter by stack name

Active View nested

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

Delete Update Stack actions Create stack

Stack info Events Resources **Outputs** Parameters Template Change sets

Outputs (4)

Search outputs

Key	Value	Description	Export name
PrivateSubnets	subnet-0cc05dd0ff686b9a,subnet-0600700b7e4179115	A list of the private subnets	myWebApp-PRIV-NETS
PublicSubnets	subnet-04201e59794554fa6,subnet-05528c92bd77778b0	A list of the public subnets	myWebApp-PUB-NETS
VPC	vpc-0d7da39282e8352f8	A reference to the created VPC	myWebApp-VPCID
WebAppLoadBalancerDNSName	http://myWeb-WebApp-1GHE64CVUFOEL-251629419.us-east-1.elb.amazonaws.com	DNS name or Public URL of the Load Balancer	myWebApp-LB-DNSName

Stack Parameters

CloudFormation > Stacks > myWebApp

Stacks (1)

Filter by stack name

Active View nested

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

Delete Update Stack actions Create stack

Stack info Events Resources Outputs **Parameters** Template Change sets

Parameters (7)

Search parameters

Key	Value	Resolved value
EnvironmentName	myWebApp	-
InstanceType	t3.medium	-
PrivateSubnet1CIDR	10.0.2.0/24	-
PrivateSubnet2CIDR	10.0.3.0/24	-
PublicSubnet1CIDR	10.0.0.0/24	-
PublicSubnet2CIDR	10.0.1.0/24	-
VpcCIDR	10.0.0.0/16	-

Stack Template

CloudFormation > Stacks > myWebApp

Stacks (1)

Filter by stack name

Active View nested

myWebApp
2022-04-01 16:04:45 UTC+0200
CREATE_COMPLETE

myWebApp

Delete Update Stack actions Create stack

Stack info Events Resources Outputs Parameters **Template** Change sets

Template

View in Designer

Description: >
Hohaned Mekawy Enam / Udagram Project

Parameters:

EnvironmentName:
Description: An environment name that will be prefixed to resources
Type: String

VpcCIDR:
Description: Please enter the IP range (CIDR notation) for this
Type: String
Default: 10.0.0.0/16

PublicSubnet1CIDR:
Description: Please enter the IP range (CIDR notation) for the Subnet
Type: String
Default: 10.0.0.0/24

PublicSubnet2CIDR:
Description: Please enter the IP range (CIDR notation) for the Subnet
Type: String
Default: 10.0.1.0/24

PrivateSubnet1CIDR:
Description: Please enter the IP range (CIDR notation) for the Subnet
Type: String
Default: 10.0.2.0/24

PrivateSubnet2CIDR:
Description: Please enter the IP range (CIDR notation) for the Subnet
Type: String
Default: 10.0.3.0/24

InstanceType:
Description:

EC2 Instances

Instances (4) Info

Search

Connect

Instance state

Actions

Launch instances

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>	-	i-0a93bcd38448fd8bd	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-	-	-
<input type="checkbox"/>	-	i-02561ff3c7948c633	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-	-	-
<input type="checkbox"/>	-	i-027007356ed65ada1	Running	t3.medium	2/2 checks passed	No alarms	us-east-1a	-	-	-
<input type="checkbox"/>	-	i-0106022b1231b8eeb	Running	t3.medium	2/2 checks passed	No alarms	us-east-1a	-	-	-

Instance Details

Instances (1/4) Info

Search

Connect

Instance state

Actions

Launch instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP	IPv6 IPs	Monitoring	Security group name	Key name	Launch time
<input checked="" type="checkbox"/>	-	i-0a93bcd38448fd8bd	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-	-	-	-	enabled	myWebApp-WebServer...	myAppVirtg...	2022/04/01 16:14 GMT+2
<input type="checkbox"/>	-	i-02561ff3c7948c633	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-	-	-	-	enabled	myWebApp-WebServer...	myAppVirtg...	2022/04/01 16:14 GMT+2
<input type="checkbox"/>	-	i-027007356ed65ada1	Running	t3.medium	2/2 checks passed	No alarms	us-east-1a	-	-	-	-	enabled	myWebApp-WebServer...	myAppVirtg...	2022/04/01 16:14 GMT+2
<input type="checkbox"/>	-	i-0106022b1231b8eeb	Running	t3.medium	2/2 checks passed	No alarms	us-east-1a	-	-	-	-	enabled	myWebApp-WebServer...	myAppVirtg...	2022/04/01 16:14 GMT+2

Instance: i-0a93bcd38448fd8bd

Select an instance above

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance summary Info

Instance ID
i-0a93bcd38448fd8bd

IPv4 address
-

Hostname type
IP name: ip-10-0-3-254.ec2.internal

Instance type
t3.medium

AWS Compute Optimizer finding
Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)

▼ Instance details Info

Platform
Ubuntu (Inferred)

Platform details
Linux/UNIX

Launch time
Fri Apr 01 2022 16:14:49 GMT+0200 (Eastern European Standard Time) (less than a minute)

Lifecycle
normal

Key pair name
myAppVirtgndEC2P

Kernel ID
-

RAM disk ID
-

Enclave support
Disabled

User data as guest OS hostname
-

Public IPv4 address
-

Instance state
Running

Private IP DNS name (IPv4 only)
ip-10-0-3-254.ec2.internal

Elastic IP address
-

Instance profile arn
arn:aws:iam::629170668893:instance-profile/myWebApp-ProfileWithRoleForOurApp-1MFU8LMDXNBD

AMI ID
ami-0e472ba0d6589f49

AMI name
ubuntu/images/hvm-ssd/ubuntu-bionic-18.04-amd64-server-20211129

AMI location
099720109477/ubuntu/images/hvm-ssd/ubuntu-bionic-18.04-amd64-server-20211129

Stop-terminate behavior
disabled

State transition reason
-

State transition message
-

Owner
629170668893

Boot mode
-

Answer key DNS hostname IPv4
-

Private IPv4 addresses
10.0.3.254

Public IPv4 DNS
-

Answer private resource DNS name
-

VPC ID
vpc-047da302e3e35278 (myWebApp)

Subnet ID
subnet-0600700b7e4179115 (myWebApp Private Subnet (AZ2))

Monitoring
detailed

Termination protection
Disabled

Instance auto-recovery
Default

AMI Launch index
0

Credit specification
unlimited

Usage operation
BurnInstances

ClassicLink
-

Allow tags in instance metadata
Disabled

Launch Configuration

EC2 > Launch configurations

Launch configurations (1/1) Info

Search launch configurations

Actions

Copy to launch template

Create launch configuration

<input checked="" type="checkbox"/>	Name	AMI ID	Instance type	Spot price	Creation time
<input checked="" type="checkbox"/>	myWebApp-WebAppLaunchConfig-Byz06407UaB	ami-0e472ba0d6589f49	t3.medium	-	Fri Apr 01 2022 16:07:14 GMT+0200 (Eastern European Standard Time)

Launch configuration: myWebApp-WebAppLaunchConfig-Byz06407UaB

Copy launch configuration

Details

Storage (volumes)

AMI ID
ami-0e472ba0d6589f49

Kernel ID
-

EBX optimized
false

Create time
Fri Apr 01 2022 16:07:14 GMT+0200 (Eastern European Standard Time)

Metadata accessible
-

User data
View user data

Instance type
t3.medium

Key name
myAppVirtgndEC2P

Security groups
sg-050abc2a3d45647

RAM disk ID
-

Token hop limit
-

AMI instance profile
myWebApp-ProfileWithRoleForOurApp-1MFU8LMDXNBD

Monitoring
true

Spot price
-

IP address type
Default

Metadata version
-

Block device	Size (GiB)	Type	IOPS	Throughput	Delete on termination	Encrypted
/dev/sdb	10	-	-	-	-	-

Auto Scaling Group

EC2 > Auto Scaling groups

Auto Scaling groups (1/1)

myWebApp-WebAppGroup-SKADEAF9349L

1 match

Copy

Edit

Delete

Create an Auto Scaling group

< 1 >

Name	Launch template/configuration	Instances	Status	Desired capacity	Min.	Max.	Availability Zones
myWebApp-WebAppGroup-SKADEAF9349L	myWebApp-WebAppLaunchConfig...	4	-	4	4	6	us-east-1a, us-east-1b

Details

Activity

Automatic scaling

Instance management

Monitoring

Instance refresh

Group details

Desired capacity
4

Minimum capacity
4

Maximum capacity
6

Auto Scaling group name
myWebApp-WebAppGroup-SKADEAF9349L

Date created
Fri Apr 01 2022 16:07:19 GMT+0200 (Eastern European Standard Time)

Amazon Resource Name (ARN)
arn:aws:autoscaling:us-east-1:639170666893:autoScalingGroup:57645f-aa04-4b31-9eaf-d1fa06252c57:autoScalingGroupName/myWebApp-WebAppGroup-SKADEAF9349L

Launch configuration

Launch configuration
myWebApp-WebAppLaunchConfig-8y05b671a08

Instance type
t3.medium

Storage (volumes)
Amazon EBS

View details in the launch configuration console

AMI ID
ami-0e472ba93eb589f49

Key pair name
myAppVirt-giawEC2PP

Security groups
sg-05da1ee2ac24456d1

Create time
Fri Apr 01 2022 16:07:14 GMT+0200 (Eastern European Standard Time)

Network

Availability Zones
us-east-1a, us-east-1b

Subnet ID
subnet-0600709b7e41793115, subnet-40c5a809ff8a60da

Load balancing

Load balancer target groups
myWeb-WebAp-1RFABWJAZ2EI

Classic Load Balancers
-

Health checks

Target Group

EC2 > Target groups

Target groups (1/1) Info

Search or filter target groups

Copy

Actions

Create target group

< 1 >

Name	ARN	Port	Protocol	Target type	Load balancer	VPC ID
myWeb-WebAp-1RFABWJAZ2EI	arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWJAZ2EI/78150a7da63080c7	80	HTTP	Instance	myWeb-WebAp-1GHE64CVUFOEL	vpc-0d7da39282e8352f8

myWeb-WebAp-1RFABWJAZ2EI

arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWJAZ2EI/78150a7da63080c7

Details

Targets

Monitoring

Health checks

Attributes

Tags

Details

Target type
Instance

IP address type
IPv4

Protocol : Port
HTTP: 80

Load balancer
myWeb-WebAp-1GHE64CVUFOEL

Protocol version
HTTP1

VPC
vpc-0d7da39282e8352f8

Total targets
4

Healthy
4

Unhealthy
0

Unused
0

Initial
0

Draining
0

EC2 > Target groups

Target groups (1/1) Info

Search or filter target groups

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Load balancer	VPC ID
<input checked="" type="checkbox"/>	myWeb-WebAp-1RFABWOJAZEII	arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWOJAZEII/78150a7da63080c7	80	HTTP	Instance	myWeb-WebAp-1GHE64CVUFOEL	vpc-0d7da39282e8352f8

myWeb-WebAp-1RFABWOJAZEII

arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWOJAZEII/78150a7da63080c7

DetailsTargetsMonitoringHealth checksAttributesTags

Registered targets (4)

Filter resources by property or value

< 1 > ⚙

<input type="checkbox"/>	Instance ID	Name	Port	Zone	Health status	Health status details
<input type="checkbox"/>	i-0106022b1231b8eeb		80	us-east-1a	healthy	
<input type="checkbox"/>	i-027007356ed65ada1		80	us-east-1a	healthy	
<input type="checkbox"/>	i-02561ff3c7948c633		80	us-east-1b	healthy	
<input type="checkbox"/>	i-0a93bcd38448fd8bd		80	us-east-1b	healthy	

EC2 > Target groups

Target groups (1/1) Info

Search or filter target groups

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Load balancer	VPC ID
<input checked="" type="checkbox"/>	myWeb-WebAp-1RFABWOJAZEII	arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWOJAZEII/78150a7da63080c7	80	HTTP	Instance	myWeb-WebAp-1GHE64CVUFOEL	vpc-0d7da39282e8352f8

myWeb-WebAp-1RFABWOJAZEII

arn:aws:elasticloadbalancing:us-east-1:629170666893:targetgroup/myWeb-WebAp-1RFABWOJAZEII/78150a7da63080c7

DetailsTargetsMonitoringHealth checksAttributesTags

Health check settings

Edit

Protocol	Path	Port	Healthy threshold
HTTP	/	Traffic port	2 consecutive health check successes
Unhealthy threshold	Timeout	Interval	Success codes
5 consecutive health check failures	15 seconds	30 seconds	200

ALB Load Balancer

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

< > 1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At	Monitoring
myWeb-WebAp-1GHE64CV...	myWeb-WebAp-1GHE64CV...	Active	vpc-0d7da39282e8352f8	us-east-1a, us-east-1b	application	April 1, 2022 at 4:05:23 PM ...	

Load balancer: myWeb-WebAp-1GHE64CVUFOEL

Description

Listeners

Monitoring

Integrated services

Tags

Basic Configuration

Name

myWeb-WebAp-1GHE64CVUFOEL

ARN

arn:aws:elasticloadbalancing:us-east-1:629170666893:loadbalancer/app/myWeb-WebAp-1GHE64CVUFOEL/1cc374b4a0da195c

DNS name

myWeb-WebAp-1GHE64CVUFOEL-251629419.us-east-1.elb.amazonaws.com

State

Active

Type

application

Scheme

internet-facing

IP address type

ipv4

VPC

vpc-0d7da39282e8352f8

Availability Zones

subnet-04201e59794554fa6 - us-east-1a

Hosted zone

Z35SXDOTRQ7X7K

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

< > 1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At	Monitoring
myWeb-WebAp-1GHE64CV...	myWeb-WebAp-1GHE64CV...	Active	vpc-0d7da39282e8352f8	us-east-1a, us-east-1b	application	April 1, 2022 at 4:05:23 PM ...	

Load balancer: myWeb-WebAp-1GHE64CVUFOEL

Description

Listeners

Monitoring

Integrated services

Tags

Listeners listen for connection requests using their protocol and port. You can add, remove, or update listeners and listener rules.

To view and edit listener attributes, select the listener and choose Edit.

Add listener

Edit

Delete

Listener ID	Security policy	SSL Certificate	Rules
HTTP : 80	N/A	N/A	Default: forwarding to myWeb-WebAp-1RFABWQJAZ2EI

<

Rules

+

⌵

−

myWeb-WebAp-1GHE64CVUFOEL | HTTP:80

To edit, select a mode above.

myWeb-WebAp-1GHE64CVUFOEL | HTTP:80 (2 rules)

Rule limits for condition values, wildcards, and total rules.

1	arn...bb6c2	IF ✓ Path is /	THEN Forward to myWeb-WebAp-1RFABWQJAZ2EI : 1 (100%) Group-level stickiness: Off
last	HTTP 80: default action <i>This rule cannot be moved or deleted</i>	IF ✓ Requests otherwise not routed	THEN Forward to myWeb-WebAp-1RFABWQJAZ2EI : 1 (100%) Group-level stickiness: Off

Networking

VPC

Your VPCs (1/2) Info

Filter VPCs

< 1 > ⚙

⌵

	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP options set	Main route table
<input type="checkbox"/>	default-vpc	vpc-0f152411687a4435e	Available	172.31.0.0/16	-	dopt-0dbfd58b14873...	rtb-0ce223e9bf1f8ef27 / ...
<input checked="" type="checkbox"/>	myWebApp	vpc-0d7da39282e8352f8	Available	10.0.0.0/16	-	dopt-0dbfd58b14873...	rtb-0cc71df9bc6ae666d

vpc-0d7da39282e8352f8 / myWebApp

Details

CIDRs

Flow logs

Tags

Details

VPC ID

🔗 vpc-0d7da39282e8352f8

Tenancy

Default

Default VPC

No

Route 53 Resolver DNS Firewall rule groups

🚫 Failed to load rule groups

State

🟢 Available

DHCP options set

dopt-0dbfd58b14873d357

IPv4 CIDR

10.0.0.0/16

Owner ID

👤 629170666893

DNS hostnames

Enabled

Main route table

rtb-0cc71df9bc6ae666d

IPv6 pool

-

DNS resolution

Enabled

Main network ACL

acl-0a2ac1b9613d209f5

IPv6 CIDR (Network border group)

-

Subnets

Subnets (4) Info

Filter subnets

< 1 > ⚙

search: myWebApp ✕

Clear filters

⌵

	Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4
<input type="checkbox"/>	myWebApp Public Subnet (AZ2)	subnet-05528c92bd77778b0	Available	vpc-0d7da39282e8352f8 myWebApp	10.0.1.0/24	-	249
<input type="checkbox"/>	myWebApp Public Subnet (AZ1)	subnet-04201e59794554fa6	Available	vpc-0d7da39282e8352f8 myWebApp	10.0.0.0/24	-	249
<input type="checkbox"/>	myWebApp Private Subnet (AZ2)	subnet-0600700b7e4179115	Available	vpc-0d7da39282e8352f8 myWebApp	10.0.3.0/24	-	249
<input type="checkbox"/>	myWebApp Private Subnet (AZ1)	subnet-0cc05dd0ff686b9a	Available	vpc-0d7da39282e8352f8 myWebApp	10.0.2.0/24	-	249

Route Tables

Route tables (1/4) Info

Filter route tables

< 1 > ⚙

search: myWebApp ✕

Clear filters

⌵

	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID
<input checked="" type="checkbox"/>	myWebApp Public Routes	rtb-07dbfa0cdd8859eaa	2 subnets	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	myWebApp Private Routes (AZ2)	rtb-0cd662643298ad2d0	subnet-0600700b7e417...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	myWebApp Private Routes (AZ1)	rtb-0dea0defe6f7f4bd7	subnet-0cc05dd0ff686...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	-	rtb-0cc71df9bc6ae666d	-	-	Yes	vpc-0d7da39282e8352f8 my...	629170666893

rtb-07dbfa0cdd8859eaa / myWebApp Public Routes

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both

< 1 > ⚙

Destination	Target	Status	Propagated
10.0.0.0/16	local	🟢 Active	No
0.0.0.0/0	igw-0f228494e6d053fc7	🟢 Active	No

Route tables (1/4) Info

Filter route tables

search: myWebApp X Clear filters

Actions

Create route table

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	myWebApp Public Routes	rtb-07dbfa0cdd8859eaa	2 subnets	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input checked="" type="checkbox"/>	myWebApp Private Routes (AZ2)	rtb-0cd662643298ad2d0	subnet-0600700b7e417...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	myWebApp Private Routes (AZ1)	rtb-0dea0defe6f7f4bd7	subnet-0cc05dd0ff686...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	-	rtb-0cc71df9bc6ae666d	-	-	Yes	vpc-0d7da39282e8352f8 my...	629170666893

rtb-0cd662643298ad2d0 / myWebApp Private Routes (AZ2)

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both

< 1 > ⚙

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	nat-0cd02bbb8dbcf082	Active	No

Route tables (1/4) Info

Filter route tables

search: myWebApp X Clear filters

Actions

Create route table

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID
<input type="checkbox"/>	myWebApp Public Routes	rtb-07dbfa0cdd8859eaa	2 subnets	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	myWebApp Private Routes (AZ2)	rtb-0cd662643298ad2d0	subnet-0600700b7e417...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input checked="" type="checkbox"/>	myWebApp Private Routes (AZ1)	rtb-0dea0defe6f7f4bd7	subnet-0cc05dd0ff686...	-	No	vpc-0d7da39282e8352f8 my...	629170666893
<input type="checkbox"/>	-	rtb-0cc71df9bc6ae666d	-	-	Yes	vpc-0d7da39282e8352f8 my...	629170666893

rtb-0dea0defe6f7f4bd7 / myWebApp Private Routes (AZ1)

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both

< 1 > ⚙

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	nat-08247b77c85feaa8	Active	No

Internet Gateway

Internet gateways (1/2) Info

Filter internet gateways

< 1

Actions

Create internet g

<input type="checkbox"/>	Name	Internet gateway ID	State	VPC ID	Owner
<input type="checkbox"/>	default-igw	igw-0e2910e5933770ea7	Attached	vpc-0f152411687a4435e default-vpc	629170666893
<input checked="" type="checkbox"/>	-	igw-0f228494e6d053fc7	Attached	vpc-0d7da39282e8352f8 myWebApp	629170666893

igw-0f228494e6d053fc7

Details

Tags

Details

Internet gateway ID

igw-0f228494e6d053fc7

State

Attached

VPC ID

vpc-0d7da39282e8352f8 | myWebApp

Owner

629170666893

NAT Gateways

NAT gateways (1/2) Info

Q Filter NAT gateways

< 1 > ⚙

	Name	NAT gateway ID	Connectivit...	State	State message	Elastic IP address	Private IP address	Network interface ID	VPC
●	-	nat-08247b77c85feaa8	Public	Available	-	44.194.207.223	10.0.0.129	eni-0cdf1800d1e9d9fb	vpc
○	-	nat-0cd02bbb8dbecf082	Public	Available	-	52.5.201.228	10.0.1.16	eni-02bd849146ff6a7e5	vpc

nat-08247b77c85feaa8

DetailsMonitoringTags

Details

NAT gateway ID

nat-08247b77c85feaa8

Elastic IP address

44.194.207.223

Subnet

subnet-04201e59794554fa6 / myWebApp Public Subnet (AZ1)

Connectivity type

Public

Private IP address

10.0.0.129

Created

Friday, April 1, 2022, 16:05:49 GMT+2

State

Available

Network interface ID

eni-0cdf1800d1e9d9fb

Deleted

-

State message

-

VPC

vpc-0d7da39282e8352f8 / myWebApp

NAT gateways (1/2) Info

Q Filter NAT gateways

< 1 > ⚙

	Name	NAT gateway ID	Connectivit...	State	State message	Elastic IP address	Private IP address	Network interface ID	VPC
○	-	nat-08247b77c85feaa8	Public	Available	-	44.194.207.223	10.0.0.129	eni-0cdf1800d1e9d9fb	vpc-0
●	-	nat-0cd02bbb8dbecf082	Public	Available	-	52.5.201.228	10.0.1.16	eni-02bd849146ff6a7e5	vpc-0

nat-0cd02bbb8dbecf082

DetailsMonitoringTags

Details

NAT gateway ID

nat-0cd02bbb8dbecf082

Elastic IP address

52.5.201.228

Subnet

subnet-05528c92bd77778b0 / myWebApp Public Subnet (AZ2)

Connectivity type

Public

Private IP address

10.0.1.16

Created

Friday, April 1, 2022, 16:05:50 GMT+2

State

Available

Network interface ID

eni-02bd849146ff6a7e5

Deleted

-

State message

-

VPC

vpc-0d7da39282e8352f8 / myWebApp

Elastic IPs

Elastic IP addresses (1/2)

Filter Elastic IP addresses

< 1 >

Actions

Allocate Elastic IP address

	Name	Allocated IPv4 add...	Type	Allocation ID	Reverse DNS record	Associated instance ID	Private IP address
<input checked="" type="checkbox"/>	-	44.194.207.223	Public IP	eipalloc-0e51e78bf001be78e	-	-	10.0.0.129
<input type="checkbox"/>	-	52.5.201.228	Public IP	eipalloc-0eaecb8bed90effad	-	-	10.0.1.16

44.194.207.223

SummaryTags

Summary

Allocated IPv4 address

44.194.207.223

Association ID

eipassoc-0526fde3331069da8

Network interface ID

eni-0cdf1800d1e9d9fb

Address pool

Amazon

Type

Public IP

Scope

VPC

Network interface owner account ID

629170666893

Network Border Group

us-east-1

Allocation ID

eipalloc-0e51e78bf001be78e

Associated instance ID

-

Public DNS

ec2-44-194-207-223.compute-1.amazonaws.com

Reverse DNS record

-

Private IP address

10.0.0.129

NAT Gateway ID

nat-08247b77c85feaa8

Elastic IP addresses (1/2)

Filter Elastic IP addresses

< 1 >

Actions

Allocate Elastic IP address

	Name	Allocated IPv4 add...	Type	Allocation ID	Reverse DNS record	Associated instance ID	Private IP address
<input type="checkbox"/>	-	44.194.207.223	Public IP	eipalloc-0e51e78bf001be78e	-	-	10.0.0.129
<input checked="" type="checkbox"/>	-	52.5.201.228	Public IP	eipalloc-0eaecb8bed90effad	-	-	10.0.1.16

52.5.201.228

SummaryTags

Summary

Allocated IPv4 address

52.5.201.228

Association ID

eipassoc-0147ad86ccb5ca2f0

Network interface ID

eni-02bd849146ff6a7e5

Address pool

Amazon

Type

Public IP

Scope

VPC

Network interface owner account ID

629170666893

Network Border Group

us-east-1

Allocation ID

eipalloc-0eaecb8bed90effad

Associated instance ID

-

Public DNS

ec2-52-5-201-228.compute-1.amazonaws.com

Reverse DNS record

-

Private IP address

10.0.1.16

NAT Gateway ID

nat-0cd02bbb8dbecf082

Security Groups

Security Groups (1/2) Info

🔄

Actions ▾

Export security groups to CSV ▾

Create security group

🔍 Filter security groups

search: myWebApp X Clear filters

<input checked="" type="checkbox"/>	Name ▾	Security group ID ▾	Security group name ▾	VPC ID ▾	Description ▾	Owner ▾	Inbound rules count ▾	Outbound rules count ▾
<input checked="" type="checkbox"/>	-	sg-050abec2ac2d456d3	myWebApp-WebServerSecGroup-YQ...	vpc-0d7da39282e8352f8	Allow http and ssh to ...	629170666893	2 Permission entries	1 Permi
<input type="checkbox"/>	-	sg-08589b2d7d6743471	myWebApp-LoadBalancerSecGroup-...	vpc-0d7da39282e8352f8	Allow http traffic to an...	629170666893	1 Permission entry	1 Permi

sg-050abec2ac2d456d3 - myWebApp-WebServerSecGroup-YQBOC7Z2MZ5P

Details

Inbound rules

Outbound rules

Tags

🔍 You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer X

Inbound rules (2)

🔄

Manage tags

Edit inbound rules

🔍 Filter security group rules

< 1 > ⚙

<input type="checkbox"/>	Name ▾	Security group rule... ▾	IP version ▾	Type ▾	Protocol ▾	Port range ▾	Source ▾	Description ▾
<input type="checkbox"/>	-	sgr-05d9279117e079...	IPv4	SSH	TCP	22	0.0.0.0/0	-
<input type="checkbox"/>	-	sgr-04406d55b6e2d8...	IPv4	HTTP	TCP	80	0.0.0.0/0	-

Security Groups (1/2) Info

🔄

Actions ▾

Export security groups to CSV ▾

Create security group

🔍 Filter security groups

search: myWebApp X Clear filters

<input checked="" type="checkbox"/>	Name ▾	Security group ID ▾	Security group name ▾	VPC ID ▾	Description ▾	Owner ▾	Inbound rules count ▾	Outbound rules count ▾
<input checked="" type="checkbox"/>	-	sg-050abec2ac2d456d3	myWebApp-WebServerSecGroup-YQ...	vpc-0d7da39282e8352f8	Allow http and ssh to ...	629170666893	2 Permission entries	1 Permis
<input type="checkbox"/>	-	sg-08589b2d7d6743471	myWebApp-LoadBalancerSecGroup-...	vpc-0d7da39282e8352f8	Allow http traffic to an...	629170666893	1 Permission entry	1 Permis

sg-050abec2ac2d456d3 - myWebApp-WebServerSecGroup-YQBOC7Z2MZ5P

Details

Inbound rules

Outbound rules

Tags

🔍 You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer X

Outbound rules (1/1)

🔄

Manage tags

Edit outbound rules

🔍 Filter security group rules

< 1 > ⚙

<input checked="" type="checkbox"/>	Name ▾	Security group rule... ▾	IP version ▾	Type ▾	Protocol ▾	Port range ▾	Destination ▾	Description ▾
<input checked="" type="checkbox"/>	-	sgr-02d28e5b5aed99f6b	IPv4	All TCP	TCP	0 - 65535	0.0.0.0/0	-

Security Groups (1/2) Info

Actions Export security groups to CSV Create security group

Filter security groups

1

search: myWebApp Clear filters

	Name	Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules count	Outbound
<input type="checkbox"/>	-	sg-050abec2ac2d456d3	myWebApp-WebServerSecGroup-YQ...	vpc-0d7da39282e8352f8	Allow http and ssh to ...	629170666893	2 Permission entries	1 Permissi
<input checked="" type="checkbox"/>	-	sg-08589b2d7d6743471	myWebApp-LoadBalancerSecGroup-...	vpc-0d7da39282e8352f8	Allow http traffic to an...	629170666893	1 Permission entry	1 Permissi

sg-08589b2d7d6743471 - myWebApp-LoadBalancerSecGroup-OGYQ5HMCWVK9

Details Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Inbound rules (1/1)

Manage tags Edit inbound rules

Filter security group rules

1

	Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Description
<input checked="" type="checkbox"/>	-	sgr-09c37f5c3c56df47e	IPv4	HTTP	TCP	80	0.0.0.0/0	-

Security Groups (1/2) Info

Actions Export security groups to CSV Create security group

Filter security groups

1

search: myWebApp Clear filters

	Name	Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules count	Outbound
<input type="checkbox"/>	-	sg-050abec2ac2d456d3	myWebApp-WebServerSecGroup-YQ...	vpc-0d7da39282e8352f8	Allow http and ssh to ...	629170666893	2 Permission entries	1 Permiss
<input checked="" type="checkbox"/>	-	sg-08589b2d7d6743471	myWebApp-LoadBalancerSecGroup-...	vpc-0d7da39282e8352f8	Allow http traffic to an...	629170666893	1 Permission entry	1 Permiss

sg-08589b2d7d6743471 - myWebApp-LoadBalancerSecGroup-OGYQ5HMCWVK9

Details Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Outbound rules (1/1)

Manage tags Edit outbound rules

Filter security group rules

1

	Name	Security group rule...	IP version	Type	Protocol	Port range	Destination	Description
<input checked="" type="checkbox"/>	-	sgr-097dab96fb77d351f	IPv4	HTTP	TCP	80	0.0.0.0/0	-

Bastion Host

Instances (1/1) Info

Q Search

jumbbox X

Clear filters

Refresh

Connect

Instance state

Actions

Launch instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input checked="" type="checkbox"/>	JumbBox	i-0927db71245e4e100	Running	t2.micro	Initializing	No alarms +	us-east-1b	ec2-107-23-120-85.co...	107.23.120.85	-

Instance: i-0927db71245e4e100 (JumbBox)

Select an instance above

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance summary Info

Instance ID

i-0927db71245e4e100 (JumbBox)

IPv6 address

-

Hostname type

IP name: ip-10-0-1-188.ec2.internal

Instance type

t2.micro

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | Learn more

▼ Instance details Info

Platform

Amazon Linux (Inferred)

Public IPv4 address

107.23.120.85 | open address

Instance state

Running

Private IP DNS name (IPv4 only)

ip-10-0-1-188.ec2.internal

Elastic IP addresses

-

IAM Role

-

Private IPv4 addresses

10.0.1.188

Public IPv4 DNS

ec2-107-23-120-85.compute-1.amazonaws.com | open address

Answer private resource DNS name

IPv4 (A)

VPC ID

vpc-0d7da39282e8352f8 (myWebApp)

Subnet ID

subnet-05528c92bd77778b0 (myWebApp Public Subnet (AZ2))

Monitoring

disabled

```
2. 107.23.120.85 (ec2-user) x +

• MobaXterm Personal Edition v21.2 •
(SSH client, X server and network tools)

> SSH session to ec2-user@107.23.120.85
• Direct SSH : ✓
• SSH compression : ✓
• SSH-browser : ✓
• X11-forwarding : ✗ (disabled or not supported by server)

> For more info, ctrl+click on help or visit our website.

_ | _ | _ )
_ | ( _ | / Amazon Linux 2 AMI
_ | \ _ | _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-188 ~]$ hostname -I
10.0.1.188
[ec2-user@ip-10-0-1-188 ~]$ ll
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1678 Apr  1 14:48 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$ chmod 400 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$ ll
total 4
-r----- 1 ec2-user ec2-user 1678 Apr  1 14:48 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$
```

Instances (1/5) Info

Search

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	JumbBox	i-0927db71245e4e100	Running	t2.micro	Initializing	No alarms	us-east-1b	ec2-107-23-120-85.co
<input checked="" type="checkbox"/>	-	i-0a93bcd38448fd8bd	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-
<input type="checkbox"/>	-	i-02561ff3c7948c633	Running	t3.medium	2/2 checks passed	No alarms	us-east-1b	-
<input type="checkbox"/>	-	i-027007356ed65ada1	Running	t3.medium	2/2 checks passed	No alarms	us-east-1a	-

Instance: i-0a93bcd38448fd8bd

Select an instance above

Details	Security	Networking	Storage	Status checks	Monitoring	Tags
▼ Instance summary Info						
Instance ID i-0a93bcd38448fd8bd		Public IPv4 address -		Private IPv4 addresses 10.0.3.254		
IPv6 address -		Instance state Running		Public IPv4 DNS -		

```
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1678 Apr  1 14:48 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$ chmod 400 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$ ll
total 4
-r----- 1 ec2-user ec2-user 1678 Apr  1 14:48 myAppNVirginiaEC2KP.pem
[ec2-user@ip-10-0-1-188 ~]$ ssh -i myAppNVirginiaEC2KP.pem ubuntu@10.0.3.254
The authenticity of host '10.0.3.254 (10.0.3.254)' can't be established.
ECDSA key fingerprint is SHA256:qS/C51R3jm54Mlhzh5mvt7SCCApRPG4KYJ9RygovQkA.
ECDSA key fingerprint is MD5:d1:5e:86:1b:18:27:bb:d9:ba:a2:ba:09:20:4c:d6:c6.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.0.3.254' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 18.04.6 LTS (GNU/Linux 5.4.0-1060-aws x86_64)

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

System information as of Fri Apr  1 14:50:08 UTC 2022

System load:  0.0               Processes:            98
Usage of /:   20.2% of 7.69GB   Users logged in:     0
Memory usage: 5%               IP address for ens5: 10.0.3.254
Swap usage:   0%

77 updates can be applied immediately.
60 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

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-10-0-3-254:~$ ll /var/www/html/
total 68
drwxr-xr-x 2 root root 4096 Apr 1 14:08 ./
drwxr-xr-x 3 root root 4096 Apr 1 14:08 ../
-rw-r--r-- 1 root root 1075 Apr 1 2022 index.html
-rw-r--r-- 1 root root 25335 Nov 4 14:03 me.jpg
-rw-r--r-- 1 root root 26201 Apr 1 13:21 myApp.zip
ubuntu@ip-10-0-3-254:~$ systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Drop-In: /lib/systemd/system/apache2.service.d
            └─apache2-systemd.conf
   Active: active (running) since Fri 2022-04-01 14:15:09 UTC; 36min ago
     Process: 775 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
    Main PID: 869 (apache2)
      Tasks: 55 (limit: 4617)
     CGroup: /system.slice/apache2.service
            └─869 /usr/sbin/apache2 -k start
              └─870 /usr/sbin/apache2 -k start
                └─871 /usr/sbin/apache2 -k start

Apr 01 14:15:09 ip-10-0-3-254 systemd[1]: Starting The Apache HTTP Server...
Apr 01 14:15:09 ip-10-0-3-254 systemd[1]: Started The Apache HTTP Server.
ubuntu@ip-10-0-3-254:~$

```

Final Output from ALB

Link: <http://myweb-webap-1ghe64cvufoel-251629419.us-east-1.elb.amazonaws.com/>


HA WebApp using AWS CF
x
+

Not secure | myweb-webap-1ghe64cvufoel-251629419.us-east-1.elb.amazonaws.com

You are viewing a myApp web page.

Mohamed Mekawy Emam

Hello, This is the required project-2 for **EgFwd AWS DevOps Advanced track**.



Technology Stack Used:

- HTML.
- CSS.
- AWS S3 Bucket with public access.
- Bucket policy allow access form EC2 to read and get objects form S3.
- AWS CF to spin ALB, TG, ASG, EC2, IAM, VPC, IGW, NATGW, Subnets, RTB.
- EC2 Bastion Host.