

## Assignment 2

*Network LoadBalancer simulation for ABC Corporates.*

The screenshot displays the AWS Management Console interface during the 'Step 5: Review' phase of creating a Network Load Balancer. The console shows the following configuration details:

- Load balancer:**
  - Name: abcLB
  - Scheme: internet-facing
  - Listeners: Port:80 - Protocol:TCP
  - IP address type: ipv4
  - VPC: vpc-0fb9f2f16aea14370 (abcvpc)
  - Subnets: subnet-0dc6b117e3e0733767 (AppServer), subnet-02cfa5487e8e0d07c (DBserver), subnet-036561df0bbe4baa1 (WebServer)
  - Tags: (empty)
- Routing:**
  - Target group: Existing target group
  - Target group name: abcTG
  - Port: 80

The interface includes navigation tabs for '1. Configure Load Balancer', '2. Configure Security Settings', '3. Configure Routing', '4. Register Targets', and '5. Review'. The 'Review' tab is active, showing a summary of the configuration and buttons for 'Cancel', 'Previous', and 'Create'.

The second screenshot shows the 'Step 3: Configure Routing' stage. It includes a description of the target group and a form to configure the routing settings:

- Target group:**
  - Target group: Existing target group
  - Name: abcTG
  - Target type: Instance (selected), IP
  - Protocol: TCP
  - Port: 80

The 'Health checks' section is partially visible at the bottom. The interface also shows navigation tabs for '1. Configure Load Balancer', '2. Configure Security Settings', '3. Configure Routing', '4. Register Targets', and '5. Review'. The 'Configure Routing' tab is active, showing the configuration details and buttons for 'Cancel', 'Previous', and 'Next: Register Targets'.

Target groups | x

How to Enable | x

Elastic Load Balancing | x

Jigsaw LMS | x

Test Page for th | x

Test Page for th | x

Test Page for th | x

+ |

console.aws.amazon.com/ec2/v2/home?region=us-east-1#TargetGroups:

aws Services Search for services, features, marketplace [Alt+S] vocstartsoft/user1425837=rajeevnitnawre@gmail.com @ 5460-8211... N. Virginia Support

Network & Security

Security Groups New

Elastic IPs New

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Key Pairs

Network Interfaces New

Load Balancing

Load Balancers

Target Groups New

Auto Scaling

Launch Configurations

Auto Scaling Groups

EC2 > Target groups

Target groups (1/1) info

Search or filter target groups

1

Actions

Create target group

Name	ARN	Port	Protocol	Target type
abcTG	arn:aws:elasticloadbalancing...	80	TCP	Instance

Target type

Instance

Protocol : Port

TCP: 80

VPC

vpc-0fb9f2f16aea14370

Load balancer

-

Total targets	Healthy	Unhealthy	Unused	Initial	Draining
0	0	0	0	0	0

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Instances | EC2 | x

How to Enable | x

Elastic Load Balancing | x

Jigsaw LMS | x

Test Page for th | x

Test Page for th | x

Test Page for th | x

+ |

Not secure | 54.158.48.39

Welcome to **nginx** on Webserver-1

This page is used to test the proper operation of the **nginx** HTTP server after it has been installed. If you can read this page, it means that the web server installed at this site is working properly.

Website Administrator

This is the default `index.html` page that is distributed with **nginx** on Amazon Linux. It is located in `/usr/share/nginx/html`.

You should now put your content in a location of your choice and edit the `root` configuration directive in the **nginx** configuration file `/etc/nginx/nginx.conf`.

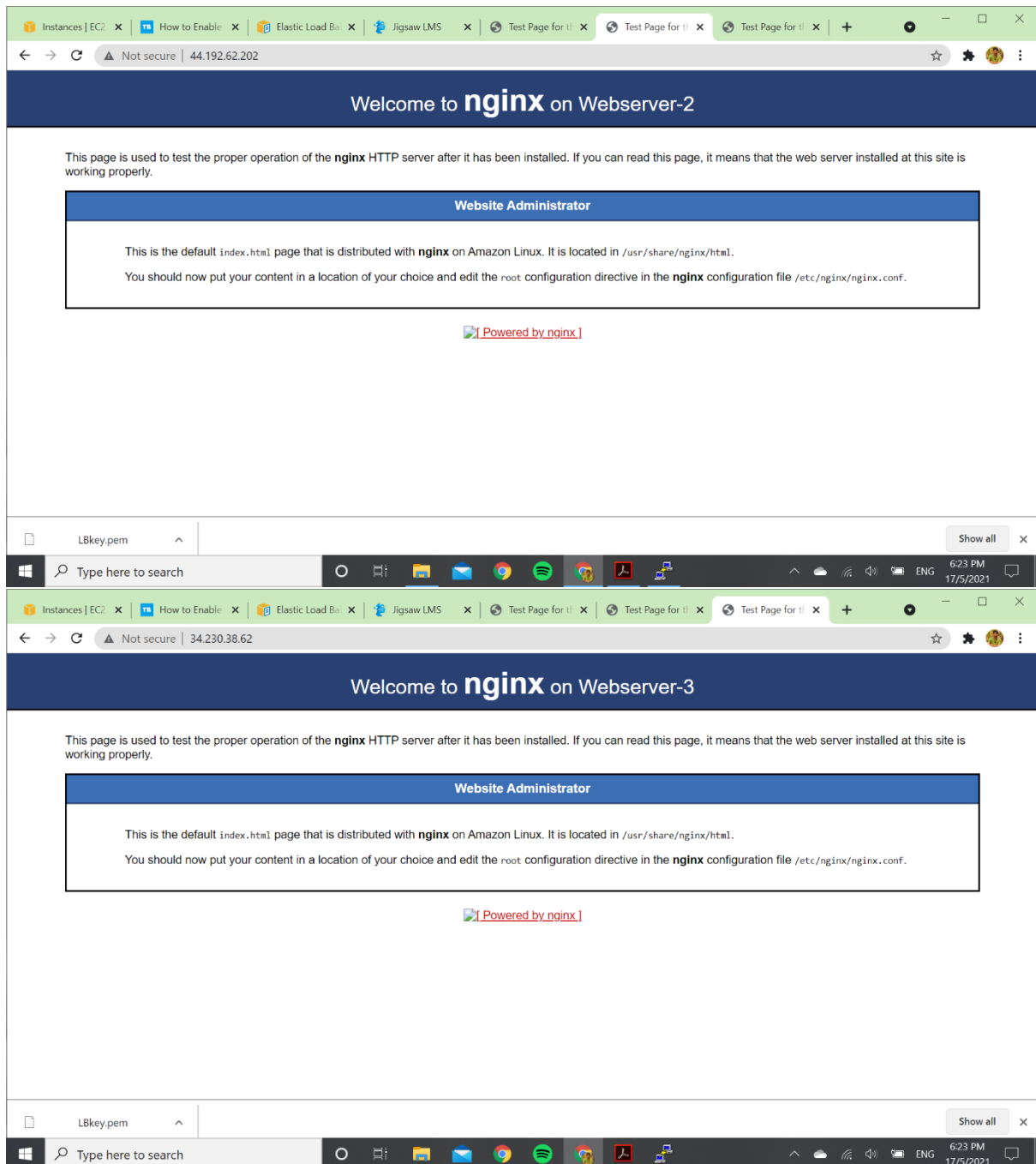
Powered by nginx

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Instances | EC2 Man... x How to Enable Rem... x Elastic Load Balanc... x Jigsaw LMS x Lab2.1 ABC Corporates LoadBalancers.pdf - Adobe Acrobat Pro DC

File Edit View Window Help

root@ip-10-50-3-209/home/ec2-user

```
#!/bin/bash
</style>
</head>
<body>
<h1>Welcome to <strong>nginx</strong> on Webserver-3</h1>
<div class="content">
<p>This page is used to test the proper operation of the
<strong>nginx</strong> HTTP server after it has been
installed. If you can read this page, it means that the
web server installed at this site is working
properly.</p>
<div class="alert">
<h2>Website Administrator</h2>
<div class="content">
<p>This is the default <tt>index.html</tt> page that
is distributed with <strong>nginx</strong> on
Amazon Linux. It is located in
<tt>/usr/share/nginx/html</tt>.</p>
</div>
</div>
</body>
</html>
```

Lab2.1 ABC Corpor... x

8 / 16

pliance with the PDF/A standard and has been opened read-only to prevent modification.

### SSH to webserver-1 using putty

to edit the system file of nginx

[vi /usr/share/nginx/html/index.html](#)

Edit the index.html as below

Details Security Networking

Instance summary Info

Instance ID

i-0798c63d76d782cab (WebServer-3)

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Instances | EC2 Man... x How to Enable Rem... x Elastic Load Balanc... x Jigsaw LMS x Test Page for the N... x Test Page for the N... x

console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:

Services Search for services, features, marketplace [Alt+S] vocstartsoft/user1425837=rajeevnitnawre@gmail.com @ 5460-8211... N. Virginia Support

New EC2 Experience

EC2 Dashboard Events Tags Limits

Instances

Instances New

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

Instances (1/6) Putty Configuration

Filter instances

Name

WebServer-2

WebServerVM

WebServer-3

Instance: i-0798c63d76d782cab

Details Security

Instance summary Info

Instance ID

i-0798c63d76d782cab

Category:

- Keyboard
- Bell
- Features
- Window
- Appearance
- Behaviour
- Translation
- Selection
- Colours
- Connection
- Data
- Proxy
- Telnet
- Flgin
- SSH
- Kex
- Host keys
- Cipher
- Auth
- TTY
- X11
- Tunnels
- Bugs
- More bugs
- Serial

Options controlling SSH authentication

☒ Display pre-authentication banner (SSH-2 only)

☐ Bypass authentication entirely (SSH-2 only)

Authentication methods

☒ Attempt authentication using Pageant

☐ Attempt TIS or CryptoCard auth (SSH-1)

☒ Attempt "keyboard-interactive" auth (SSH-2)

Authentication parameters

☐ Allow agent forwarding

☐ Allow attempted changes of username in SSH-2

Private key file for authentication:

C:\Users\revan\Downloads\LBkey.ppk

Browse...

Open Cancel

copied

type Status check Alarm status Ave

2/2 checks passed 1 alarms +

1/1 has +

Initializing 1/1 has +

Private IPv4 addresses

10.50.3.209

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Instances | EC2 Man

How to Enable Rem

Elastic Load Balanc

Jigsaw LMS

Test Page for the N

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console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:

aws

Services

Search for services, features, marketplace

[Alt+S]

vocstartsoft/user1425837=rajeevniitnawre@gmail.com @ 5460-8211...

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Support

New EC2 Experience

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Instances (1/6)

Info

Filter instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Av
<input type="checkbox"/>	WebServer-2	i-0d0bb7ddcb68ed5c8	Running	t2.micro	2/2 checks passed	1 alarms	us-
<input type="checkbox"/>	WebServerVM	i-0f7d662b9569b9874	Stopped	t2.micro	-	1/1 has i	us-
<input checked="" type="checkbox"/>	WebServer-3	i-0798c63d76d782cab	Running	t2.micro	Initializing	1/1 has i	us-

Instance: i-0798c63d76d782cab (WebServer-3)

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

Instance summary

Info

Instance ID

i-0798c63d76d782cab (WebServer-3)

Public IPv4 address

Public IPv4 address copied

Private IPv4 addresses

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EC2 Managem

How to Enable

Elastic Load Bal

Jigsaw LMS

Test Page for th

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console.aws.amazon.com/ec2/v2/home?region=us-east-1#LoadBalancers:sort=loadBalancerName

aws

Services

Search for services, features, marketplace

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Support

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 Balancer

Actions

Filter by tags and attributes or search by keyword

	Name	DNS name	State	VPC ID	Availability Zones
<input checked="" type="checkbox"/>	abcLB	abcLB-0012596514ed0a34....	provisioning	vpc-0fb912f16aea14370	us-east-1c, us-east-1b, ...

Load balancer: abcLB

Description

Listeners

Monitoring

Integrated services

Tags

Basic Configuration

Feedback

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Create Load Balancer xHow to Enable xElastic Load Balancing xJigsaw LMS xTest Page for t... xTest Page for t... xTest Page for t... x+

console.aws.amazon.com/ec2/v2/home?region=us-east-1#V2CreateELBWizard:type=network:...

awsServicesSearch for services, features, marketplace [Alt+S]vocstartsoft/user.1425837=rajeevnitnawre@gmail.com @ 5460-8211...N. VirginiaSupport

## Load Balancer Creation Status



**Successfully created load balancer**  
Load balancer [abcLB](#) was successfully created.  
Note: It might take a few minutes for your load balancer to be fully set up and ready to route traffic, and for the targets to complete the registration process and pass the initial health checks.

**Suggested next steps**

- Check your listeners and individually customize them. If you set an ALPN policy for a TLS listener during the load balancer creation process, you must confirm that the TLS listener is configured to forward traffic to a TLS target group in order for the ALPN policy to take effect. Visit the **Listeners** tab within [abcLB](#)

Close

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