

# Configure SSL in ALB

EC2 > Load balancers > alb

alb

Details

Load balancer type

Application

Status

Active

VPC

vpc-0991c17334e8ce218

IP address type

IPv4

Scheme

Internet-facing

Hosted zone

Z3AADJGX6KTTL2

Availability Zones

subnet-083fef4d98e662676

us-east-2a (use2-az1)

subnet-02d9f4cdfc1557ff6

us-east-2b (use2-az2)

subnet-0cf1931ad9e86b5a7

us-east-2c (use2-az3)

Date created

November 4, 2023, 22:45 (UTC+06:00)

Load balancer ARN

arn:aws:elasticloadbalancing:us-east-2:999838272208:loadbalancer/app/alb/3201d0ffec462fbc

DNS name

alb-323805044.us-east-2.elb.amazonaws.com (A Record)

Listeners and rules

Network mapping

Security

Monitoring

Integrations

Attributes

Tags

Listeners and rules (2)

Info

Manage rules

Manage listener

Add listener

Filter listeners

<

1

>

Protocol:Port

Default action

Rules

ARN

Security policy

Default SSL/TLS certificate

Tags

## Add listener [Info](#)

Add a listener to your Application Load Balancer (ALB) to define how client requests and network traffic are routed within your application. Every listener is made up of a default action that's required and can only be edited. Additional rules can be added, edited and deleted from the listener.

### ► Load balancer details: alb

#### Listener details: HTTPS:443

A listener checks for connection requests using the protocol and port that you configure. The default action and any additional rules that you create determine how the Application Load Balancer routes requests to its registered targets.

#### Listener configuration

The listener will be identified by the protocol and port.

##### Protocol

Used for connections from clients to the load balancer.

HTTPS ▼

##### Port

The port on which the load balancer is listening for connections.

443

1-65535

#### Default actions [Info](#)

The default action is used if no other rules apply. Choose the default action for traffic on this listener.

#### Authentication [Info](#)

☐ Use OpenID or Amazon Cognito

Include authentication using either OpenID Connect (OIDC) or Amazon Cognito.

#### Routing actions

☒ Forward to target groups

☐ Redirect to URL

☐ Return fixed response

#### Forward to target group [Info](#)

Choose a target group and specify routing weight or [Create target group](#).

##### Target group

tg-alb

Target type: Instance, IPv4

HTTP ▼



##### Weight

1

0-999

##### Percent

100%

### Add target group

You can add up to 4 more target groups.

#### Group-level stickiness [Info](#)

If a target group is sticky, requests routed to it remain in that target group for the duration of the session. Individual target stickiness is a configuration of the target group.

☐ Turn on group-level stickiness

## Secure listener settings [Info](#)

### Security policy

Your load balancer uses a Secure Socket Layer (SSL) negotiation configuration called a security policy to manage SSL connections with clients.

ELBSecurityPolicy-TLS13-1-2-2021-06 (recommended)

[Compare security policies](#)

### Default SSL/TLS server certificate

The certificate used if a client connects without SNI protocol, or if there are no matching certificates. You can source this certificate from AWS Certificate Manager (ACM), Amazon Identity and Access Management (IAM), or import a certificate. This certificate will automatically be added to your listener certificate list.

#### Certificate source

☒ From ACM

☐ From IAM

☐ Import certificate

#### Certificate (from ACM)

The selected certificate will be applied as the default SSL/TLS server certificate for this load balancer's secure listeners.

mobile.rajivsiddiqui.com  
76ef8b64-7a6f-4052-92d4-d04f0...



[Request new ACM certificate](#)

click this one and open new tab and create a certificate and after creating the certificate we come back here and select the certificate

### ► Listener tags - optional

Tags can help you manage, identify, organize, search for and filter resources.

Cancel

Add

#### AWS Certificate Manager (ACM)

##### List certificates

[Request certificate](#)

[Import certificate](#)

[AWS Private CA](#)

AWS Certificate Manager > Certificates

Certificates (0)



Delete

Manage expiry events

Import

Request

< 1 > @

	Certificate ID	Domain name	Type	Status	In use	Renewal eligibility	Key algorithm
--	----------------	-------------	------	--------	--------	---------------------	---------------

There are no certificates in your account.

There are no certificates in your account.

# Request certificate

## Certificate type [Info](#)

ACM certificates can be used to establish secure communications access across the internet or within an internal network. Choose the type of certificate for ACM to provide.

- ☒ **Request a public certificate**  
Request a public SSL/TLS certificate from Amazon. By default, public certificates are trusted by browsers and operating systems.
- ☐ **Request a private certificate**  
No private CAs available for issuance.

Requesting a private certificate requires the creation of a private certificate authority (CA). To create a private CA, visit [AWS Private Certificate Authority](#) 

[Cancel](#)[Next](#)

## AWS Certificate Manager (ACM)

[List certificates](#)[Request certificate](#)[Import certificate](#)[AWS Private CA](#) 

## Request public certificate

### Domain names

Provide one or more domain names for your certificate.

Fully qualified domain name [Info](#)

[Add another name to this certificate](#)

You can add additional names to this certificate. For example, if you're requesting a certificate for "www.example.com", you might want to add the name "example.com" so that customers can reach your site by either name.

### Validation method [Info](#)

Select a method for validating domain ownership.

- ☒ **DNS validation - recommended**  
Choose this option if you are authorized to modify the DNS configuration for the domains in your certificate request.
- ☐ **Email validation**  
Choose this option if you do not have permission or cannot obtain permission to modify the DNS configuration for the domains in your certificate request.

### Key algorithm [Info](#)

Select an encryption algorithm. Some algorithms may not be supported by all AWS services.

- ☒ **RSA 2048**  
RSA is the most widely used key type.
- ☐ **ECDSA P 256**  
Equivalent in cryptographic strength to RSA 3072.
- ☐ **ECDSA P 384**  
Equivalent in cryptographic strength to RSA 7680.

### Tags [Info](#)

To help you manage your certificates, you can optionally assign your own metadata to each resource in the form of tags.

No tags associated with this resource.

[Add tag](#)

You can add 50 more tag(s).


[Cancel](#)[Previous](#)[Request](#)

## AWS Certificate Manager (ACM)

[List certificates](#)[Request certificate](#)[Import certificate](#)[AWS Private CA](#) 

**Successfully requested certificate with ID 76ef8b64-7a6f-4052-92d4-d04f0d60574e**  
A certificate request with a status of pending validation has been created. Further action is needed to complete the validation and approval of the certificate.

[View certificate](#) **Certificates (1)**[Delete](#)[Manage expiry events](#)[Import](#)[Request](#)< 1 > 

<input type="checkbox"/>	Certificate ID	Domain name	Type	Status	In use	Renewal eligibility	Key algorithm
<input type="checkbox"/>	76ef8b64-7a6f-4052-92d4-d04f0d60574e	mobile.rajivsididui.com	Amazon issued	 Pending validation	No	Ineligible	RSA 2048

- List certificates
- Request certificate
- Import certificate
- AWS Private CA

76ef8b64-7a6f-4052-92d4-d04f0d60574e

Delete

Certificate status

Identifier	Status
76ef8b64-7a6f-4052-92d4-d04f0d60574e	<a href="#">Pending validation</a> <a href="#">Info</a>
ARN	
<a href="#">arn:aws:acm:us-east-2:999838272208:certificate/76ef8b64-7a6f-4052-92d4-d04f0d60574e</a>	
Type	
Amazon Issued	

Domains (1)

Create records in Route 53

Export to CSV

< 1 >

Domain	Status	Renewal status	Type	CNAME name	CNAME value
mobile.rajivsiddiqui.com	<a href="#">Pending validation</a>	-	CNAME	<a href="#">_a0a7d8b80713ed98d9730eff5004a78e.mobile.rajivsiddiqui.com.</a>	<a href="#">_614f5d9f281d4a9f9278d8e34cdd2a9c.zqwxgqxjmm.acm-validations.aws.</a>

Details

In use	Serial number	Requested at	Renewal eligibility
No	N/A	November 06, 2023, 12:14:32 (UTC+06:00)	Ineligible
Domain name	Public key info	Issued at	
mobile.rajivsiddiqui.com	RSA 2048	N/A	
Number of additional names	Signature algorithm	Not before	
0	SHA-256 with RSA	N/A	
	Can be used with	Not after	
	CloudFront, Elastic Load Balancing, API Gateway and other integrated services.	N/A	

- List certificates
- Request certificate
- Import certificate
- AWS Private CA

Create DNS records in Amazon Route 53 (1/1)

Search domains

1 match

< 1 >

Validation status: Pending validation

Validation status: Failed

Is domain in Route 53?: Yes

Clear filter

<input checked="" type="checkbox"/>	Domain	Validation status	Type	CNAME name	CNAME value	Is domain in Route 53?
<input checked="" type="checkbox"/>	mobile.rajivsiddiqui.com	<a href="#">Pending validation</a>	CNAME	<a href="#">_a0a7d8b80713ed98d9730eff5004a78e.mobile.rajivsiddiqui.com.</a>	<a href="#">_614f5d9f281d4a9f9278d8e34cdd2a9c.zqwxgqxjmm.acm-validations.aws.</a>	Yes

Cancel

Create records

## AWS Certificate Manager (ACM)

List certificates  
Request certificate  
Import certificate  
AWS Private CA [🔗](#)

AWS Certificate Manager > Certificates > 76ef8b64-7a6f-4052-92d4-d04f0d60574e

### 76ef8b64-7a6f-4052-92d4-d04f0d60574e

[Delete](#)

#### Certificate status

Identifier  
76ef8b64-7a6f-4052-92d4-d04f0d60574e

ARN  
[🔗](#) arn:aws:acm:us-east-2:999838272208:certificate/76ef8b64-7a6f-4052-92d4-d04f0d60574e

Type  
Amazon Issued

Status  
[🔗](#) Pending validation [Info](#)

#### Domains (1)

[Create records in Route 53](#)[Export to CSV](#) [📄](#)

< 1 >

Domain	Status	Renewal status	Type	CNAME name	CNAME value
mobile.rajivsiddiqui.com	<a href="#">🔗</a> Pending validation	-	CNAME	<a href="#">🔗</a> _a0a7d8b80713ed98d9730eff5004a78e.mobile.rajivsiddiqui.com.	<a href="#">🔗</a> _614f5d9f281d4a9f9278d8e34cdd2a9c.zqwxgqxjmm.acm-validations.aws.

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## AWS Certificate Manager (ACM)

List certificates  
Request certificate  
Import certificate  
AWS Private CA [🔗](#)

AWS Certificate Manager > Certificates > 76ef8b64-7a6f-4052-92d4-d04f0d60574e

### 76ef8b64-7a6f-4052-92d4-d04f0d60574e

[Delete](#)

#### Certificate status

Identifier  
76ef8b64-7a6f-4052-92d4-d04f0d60574e

ARN  
[🔗](#) arn:aws:acm:us-east-2:999838272208:certificate/76ef8b64-7a6f-4052-92d4-d04f0d60574e

Type  
Amazon Issued

Status  
[🔗](#) Issued

#### Domains (1)

[Create records in Route 53](#)[Export to CSV](#) [📄](#)

< 1 >

Domain	Status	Renewal status	Type	CNAME name	CNAME value
mobile.rajivsiddiqui.com	<a href="#">🔗</a> Success	-	CNAME	<a href="#">🔗</a> _a0a7d8b80713ed98d9730eff5004a78e.mobile.rajivsiddiqui.com.	<a href="#">🔗</a> _614f5d9f281d4a9f9278d8e34cdd2a9c.zqwxgqxjmm.acm-validations.aws.

#### Details

Now go to add listener page and select the certificate

## Secure listener settings [Info](#)

### Security policy

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ELBSecurityPolicy-TLS13-1-2-2021-06 (recommended) ▼

[Compare security policies](#) [↗](#)

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☐ From IAM

☐ Import certificate

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mobile.rajivsiddiqui.com ▼  
76ef8b64-7a6f-4052-92d4-d04f0...



[Request new ACM certificate](#) [↗](#)

### ► Listener tags - *optional*

Tags can help you manage, identify, organize, search for and filter resources.

Cancel

Add

Now click add

Now go to the route 53 add a record mobile.rajivsiddiqui.com

## Create record [Info](#)

**Quick create record** [Switch to wizard](#)

**Record 1** [Delete](#)

**Record name** [Info](#)

mobile .rajivsiddiqui.com

Keep blank to create a record for the root domain.

☒ Alias

**Route traffic to** [Info](#)

Alias to Application and Classic Load Balancer

US East (Ohio)

Q dualstack.alb-323805044.us-east-2.elb.amazonaws.com X

Alias hosted zone ID: Z3AADJGX6KTTLZ

**Routing policy** [Info](#)

Simple routing

**Evaluate target health**

☒ Yes

[Add another record](#)

[Cancel](#) [Create records](#)

Record for rajivsiddiqui.com was successfully created.

Route 53 propagates your changes to all of the Route 53 authoritative DNS servers within 60 seconds. Use "View status" button to check propagation status.

[View status](#) X

Public rajivsiddiqui.com [Info](#)

[Delete zone](#)

[Test record](#)

[Configure query logging](#)

► Hosted zone details

[Edit hosted zone](#)

## C02938601I2RNKIIIEKI40 [Info](#)

### Change info details [G](#)

ID  
/change/C02938601I2RNKIIIEKI40

Submitted at  
November 06, 2023, 12:30 (UTC+06:00)

Status  
⌚ PENDING

Comment  
-

## C02938601I2RNKIIIEKI40 [Info](#)

### Change info details [G](#)

ID  
/change/C02938601I2RNKIIIEKI40

Submitted at  
November 06, 2023, 12:30 (UTC+06:00)

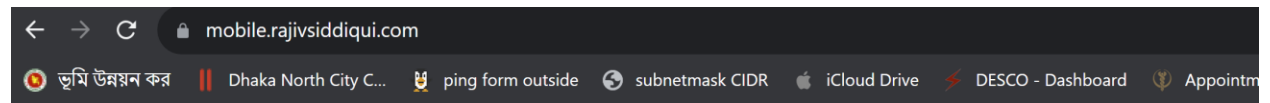
Status  
✅ INSYNC

Comment  
-



Now we can browse our page by SSL

<https://mobile.rajivsiddiqui.com>



# Hello World from ip-172-31-15-142.us-east-2.compute.internal

Now need to change one thing which is if user type <http://doamin> then it redirect to <https://domain>

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

New

▼ Images

AMIs

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

Auto Scaling Groups

EC2 > Load balancers > alb

alb

▼ Details

Load balancer type

Application

Status

Active

VPC

vpc-0991c17334e8cc218

IP address type

IPv4

Scheme

Internet-facing

Hosted zone

Z3AADJGX6KTTL2

Availability Zones

subnet-083ef4d98e662676 us-east-2a (use2-az1)

Date created

November 4, 2023, 22:45 (UTC+06:00)

subnet-07d9f4c0fc1557ff6 us-east-2b (use2-az2)

subnet-0cf1931ad9e86b5a7 us-east-2c (use2-az3)

Load balancer ARN

arn:aws:elasticloadbalancing:us-east-2:999838272208:loadbalancer/app/alb/3201d0ffec462fbc

DNS name info

alb-323805044.us-east-2.elb.amazonaws.com (A Record)

Listeners and rules

Network mapping

Security

Monitoring

Integrations

Attributes

Tags

Listeners and rules (2) Info

A listener checks for connection requests on its configured protocol and port. Traffic received by the listener is routed according to the default action and any additional rules.

Filter listeners

< 1 > ⚙

☐

Protocol:Port

☐

HTTPS:443

☐

HTTP:80

Forward to target group

• tg-alb 1 (100%)

• Group-level stickiness: Off

1 rule

ARN

ELBSecurityPolicy-TLS13-1-2-...

mobile.rajivsiddiqui.com (Certi...

0 tags

Forward to target group

• tg-alb 1 (100%)

• Group-level stickiness: Off

2 rules

ARN

Not applicable

Not applicable

0 tags

Listener rules (1/2) Info

Traffic received by the listener is routed according to the default action and any additional rules. Rules are evaluated in priority order from the lowest value to the highest value.

Filter rules

Rule limits

Actions

View rule

Edit rule

Delete rule

Reprioritize rules

Add rule

☐

my-rule-a

5

Path Pattern is /error

Return fixed response

• Response code: 404

• Response body: not found, custom error

• Response content type: text/plain

ARN

1 tag

☒

Default

Last (default)

If no other rule applies

Forward to target group

• tg-alb 1 (100%)

• Group-level stickiness: Off

ARN

0 tags

## Listener configuration

The listener will be identified by the protocol and port.

### Protocol

Used for connections from clients to the load balancer.

HTTP

### Port

The port on which the load balancer is listening for connections.

80

1-65535

## Default actions [Info](#)

The default action is used if no other rules apply. Choose the default action for traffic on this listener.

### Routing actions



Forward to target groups



Redirect to URL



Return fixed response

### Redirect to URL [Info](#)

Redirect client requests from one URL to another. You cannot redirect HTTPS to HTTP. To avoid a redirect loop, you must modify at least one of the following components: protocol, port, hostname or path. Components that you do not modify retain their original values.

URI parts

Full URL

### Protocol

Used for connections from clients to the load balancer.

HTTPS

### Port

The port on which the load balancer is listening for connections.

443

1-65535 or to retain the original port enter #{port}



Custom host, path, query

Select to modify host, path and query. If no changes are made, settings from the request URL are retained.

### Status code

301 - Permanently moved

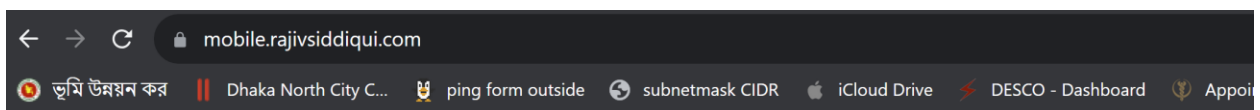
## ► Listener tags - optional

Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

Cancel

Save changes

Now if we browse <http://mobile.rajivsiddiqui.com> it will redirect to <https://mobile.rajivsiddiqui.com>



Hello World from ip-172-31-12-179.us-east-2.compute.internal