

Update ALB

Creating alb.<team_name>.intern.amitj.com.np record Specified in Q2

The screenshot shows the AWS Route 53 console with the 'Records (7)' tab selected. The hosted zone is 'intern.amitj.com.np'. The selected record is 'team-d.intern.amitj.com.np' of type 'A'. The right-hand pane shows the 'Record details' for this record.

Record name	Type	Routin...	Differ...	Value/Route traffic to
intern.amitj.com.np	NS	Simple	-	ns-149.awsdns-18.com, ns-1360.awsdns-42.org, ns-589.awsdns-09.net, ns-1543.awsdns-00.co.uk.
intern.amitj.com.np	SOA	Simple	-	ns-149.awsdns-18.com. awsdns-h...
_778eca02704509dbb7c51e2ac...	CNAME	Simple	-	_35c8b6c11abdceffe11b03810dd...
alb.intern-c.intern.amitj.com.np	A	Simple	-	dualstack.intern-c-lb-145950749...
py.intern.amitj.com.np	A	Simple	-	dualstack.intern-tutor-47669852...
team-d.intern.amitj.com.np	A	Simple	-	dualstack.team-d-lb-979181073....
_ac5d2b6215050b50497c606d...	CNAME	Simple	-	_050f9a386ea1584b5c09028578...

Record details for team-d.intern.amitj.com.np:

- Record name: team-d.intern.amitj.com.np
- Record type: A
- Value: dualstack.team-d-lb-979181073.us-east-2.elb.amazonaws.com.
- Alias: Yes
- TTL (seconds): -

Mapping alb.<record> to Load Balancer of Team-D

The screenshot shows the 'Quick create record' wizard in the AWS Route 53 console. The record name is 'alb.team-d.intern.amitj.com.np'. The record type is 'A - Routes traffic to an IPv4 address and so...'. The 'Route traffic to' section is configured with an alias to 'Application and Classic Load Balancer' in the 'US East (Ohio) [us-east-2]' region. The selected load balancer is 'dualstack.Team-D-LB-979181073.us-east-2.elb.amazonaws.com'.

Record 1 configuration:

- Record name: alb.team-d.intern.amitj.com.np
- Record type: A - Routes traffic to an IPv4 address and so...
- Route traffic to: Alias (selected)
- Alias to: Application and Classic Load Balancer
- Region: US East (Ohio) [us-east-2]
- Load balancer: dualstack.Team-D-LB-979181073.us-east-2.elb.amazonaws.com

Successfully Created Records - alb.team-d.intern.amitj.com.np

Records (1/8) Info					
Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.					
<div><div><div><div></div></div></div><div>Delete record</div><div>Import zone file</div><div>Create record</div></div>					
<div><div><div>Q</div><div>Filter records by property or value</div></div><div>Type ▼</div><div>Routing policy ▼</div><div>Alias ▼</div><div>< 1 ></div><div>⚙</div></div>					
	Record name	Type	Routin...	Differ...	Value/Route traffic to
<input type="checkbox"/>	intern.amitj.com.np	NS	Simple	-	ns-149.awsdns-18.com. ns-1360.awsdns-42.org. ns-589.awsdns-09.net. ns-1543.awsdns-00.co.uk.
<input type="checkbox"/>	intern.amitj.com.np	SOA	Simple	-	ns-149.awsdns-18.com. awsdns-hc
<input type="checkbox"/>	_778eca02704509dbb7c51e2a...	CNAME	Simple	-	_35c8b6c11abdceffe11b03810ddf
<input type="checkbox"/>	alb.intern-c.intern.amitj.com.np	A	Simple	-	dualstack.intern-c-lb-1459507494
<input type="checkbox"/>	py.intern.amitj.com.np	A	Simple	-	dualstack.intern-tutor-476698526
<input type="checkbox"/>	team-d.intern.amitj.com.np	A	Simple	-	dualstack.team-d-lb-979181073.u
<input type="checkbox"/>	_ac5d2b6215050b50497c606d...	CNAME	Simple	-	_050f9a386ea1584b5c090285783
<input checked="" type="checkbox"/>	alb.team-d.intern.amitj.com.np	A	Simple	-	dualstack.team-d-lb-979181073.u

Updating ALB Listeners

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LoadBalancers:sort=loadBalancerName

aws Services Search for services, features, blogs, docs, and more [Alt+S]

AMIs New

Elastic Block Store

Volumes New

Snapshots New

Lifecycle Manager New

Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

Load Balancing

Load Balancers

Target Groups New

Auto Scaling

Launch Configurations

Auto Scaling Groups

Create Load Balancer Actions

Filter by tags and attributes or search by keyword

<input type="checkbox"/>	Name	DNS name	State	VPC ID
<input type="checkbox"/>	team-b-alb	team-b-alb-1569696097.us-...	Active	vpc-0129bda0428def1cf
<input checked="" type="checkbox"/>	Team-D-LB	Team-D-LB-979181073.us-e...	Active	vpc-0537baf72f80d5930

Load balancer: Team-D-LB

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

<input type="checkbox"/>	Listener ID	Security policy	SSL Certificate	Rules
<input type="checkbox"/>	HTTP : 80 arn...9bbf7fd3df9d9f23	N/A	N/A	Default: forwarding to Team-D-LB-TG View/edit rules

Default Rule

The screenshot shows the 'Rules' page for 'Team-D-LB | HTTP:80'. It displays a single rule with the following details:

last	HTTP 80: default action	IF	THEN
	<i>This rule cannot be moved or deleted</i>	✓ Requests otherwise not routed	Forward to Team-D-LB-TG: 1 (100%) Group-level stickiness: Off

Adding Rule for host alb.team-d.intern.amitj.com.np to redirect to target group

The screenshot shows the 'Rules' page with a dashed box indicating where to click to add a new rule. The 'Insert Rule' button is visible. Below it, a table shows the structure of the new rule:

RULE ID	IF (all match)	THEN
1 A rule ID (ARN) is generated when you save your rule.	Host is alb.team-d.intern.amitj.com.np + Add condition	1. Forward to Team-D-LB-TG: 1 (100%) Group-level stickiness: Off + Add action

And if other requests comes “response with 503 code” with message “unknown request”

The screenshot shows the 'Edit Rule' page for a new rule. The configuration is as follows:

RULE ID	IF (all match)	THEN
last arn...8d420	✓ Requests otherwise not routed	1. Return fixed response... Response code (2xx, 4xx, 5xx) 503 Content-Type (optional) text/plain Response body (optional) Unknown Request

Saving the rule

Rules of ALB

Select the rule to edit. Each rule must include one action of type forward, redirect, fixed response.

✓ Default rule was successfully updated.

Team-D-LB | HTTP:80 (2 rules)

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

Order	ARN	IF	THEN
1	arn...59f68	✓ Host is alb.team-d.intern.amitj.com.np	Forward to Team-D-LB-TG: 1 (100%) Group-level stickiness: Off
last	HTTP 80: default action <i>This rule cannot be moved or deleted</i>	✓ Requests otherwise not routed	Return fixed response 503 Content-Type: text/plain Response body: Unknown Request (less...)

Again Adding another listener for HTTPS requests

Create Load Balancer Actions

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones	Type
team-b-alb	team-b-alb-1569696097.us-...	Active	vpc-0129bda0428def1cf	us-east-2b, us-east-2a	application
Team-D-LB	Team-D-LB-979181073.us-e...	Active	vpc-0537baf72f80d5930	us-east-2c, us-east-2b, ...	application

Load balancer: Team-D-LB

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 arn...9bbf7fd3df9d9f23	N/A	N/A	Default: returning fixed response 503 View/edit rules

Listener Details with HTTPS port - 443

EC2 > Load balancers > Team-D-LB : Add listener

Add listener

Listener details


A listener is a process that checks for connection requests, using the protocol and port you configure. Traffic received by the listener is then routed per your specification. You can specify multiple rules and multiple certificates per listener after the load balancer is created.

Protocol: HTTPS ▼ Port: 443
1-65535

Default actions [Info](#)

Specify the default actions for traffic on this listener. Default actions apply to traffic that does not meet the conditions of rules on your listener. Rules can be configured after the listener is created.

▼ 1. Forward to [Info](#) Remove

Target group		Weight (0-999)	
<div>Team-D-LB-TG <small>Target type: Instance, IPv4</small></div>	HTTP ▼	<div>1</div>	×
Traffic distribution:		100%	

Forwarding the request to Target Group

Adding SSL certificate from ACM which we have created earlier

If you enable stickiness for your target group, requests routed to it remain in the same group for the duration you specify.

Add action ▼

Secure listener settings [Info](#)

Security policy
Your load balancer uses a Secure Socket Layer (SSL) negotiation configuration, known as a security policy, to negotiate SSL connections with clients.

ELBSecurityPolicy-2016-08 ▼

[Compare security policies](#) [↗](#)

Default SSL certificate
The certificate used if a client connects without SNI protocol, or if there are no matching certificates. You can add more certificates after you create the load balancer.

From ACM ▼ team-d.intern.amitj.com.np ▼ [↻](#)

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

Successfully created Listener for HTTPS requests

Create Load Balancer Actions ▼

search : Team-D-LB Add filter

Name	DNS name	State	VPC ID	Availability Zones	Type
Team-D-LB	Team-D-LB-979181073.us-e...	Active	vpc-0537baf72f80d5930	us-east-2c, us-east-2b, ...	application

Load balancer: Team-D-LB

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
<input type="checkbox"/> HTTP : 80 arn...9bbf7fd3df9d9f23 ▼	N/A	N/A	Default: returning fixed response 503 View/edit rules
<input type="checkbox"/> HTTPS : 443 ▲ arn...525c3fc6c36ad6f5 ▼	ELBSecurityPolicy-2016-08	Default: f0826437-b934-47c4-954d-b66998c81bd0 (ACM) View/edit certificates	Default: forwarding to Team-D-LB-TG View/edit rules

Editing Listener HTTP (80) to redirect all requests to HTTPS (443)

Select the rule to edit. Each rule must include one action of type forward, redirect, fixed response.

Cancel Update

Team-D-LB | HTTP: 80

Edit Rule

RULE ID	IF (all match)	THEN
1 arn...59f68	<p>Host is alb.team-d.intern.amity.com.np</p> <p>+ Add condition</p>	<p>1. Redirect to...</p> <p>HTTPS 443 Original value: #{port}</p> <p>Original host, path, query</p> <p>301 - Permanently moved</p> <p>Switch to full URL</p> <p>+ Add action</p>

last HTTP 80: default IF THEN

Default rule in load balancer security group

Security Groups (1/15) Info

Filter security groups

Name	Security group ID	Security group name	VPC ID	Description
Team-D-LB-SG	sg-07ac702840d3f1b41	Team-D-LB-SG	vpc-0537baf72f80d5930	Sg for load balancer

Details Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

Inbound rules (1/1)

Filter security group rules

Name	Security group rule...	IP version	Type	Protocol
-	sgr-06a6ef09a12edc9e4	IPv4	HTTP	TCP

Allowing port 443 in load balancer security group

EC2 > Security Groups > sg-07ac702840d3f1b41 - Team-D-LB-SG > Edit inbound rules

Edit inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules [Info](#)

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info	
sg-06a6ef09a12edc9e4	HTTP	TCP	80	Custom <input type="text" value="0.0.0.0"/>	Allowed for port 80	Delete
-	HTTPS	TCP	443	Anywh... <input type="text" value="0.0.0.0"/>		Delete

[Add rule](#)

[Cancel](#) [Preview changes](#) [Save rules](#)

Now Listener 443 also get validated

[Create Load Balancer](#) [Actions](#)

search : Team-D-LB [Add filter](#) << < 1 to 1 of 1 > >>

Name	DNS name	State	VPC ID	Availability Zones	Type
Team-D-LB	Team-D-LB-979181073.us-e...	Active	vpc-0537baf72f80d5930	us-east-2c, us-east-2b, ...	application

Load balancer: **Team-D-LB**

[Description](#) [Listeners](#) [Monitoring](#) [Integrated services](#) [Tags](#)

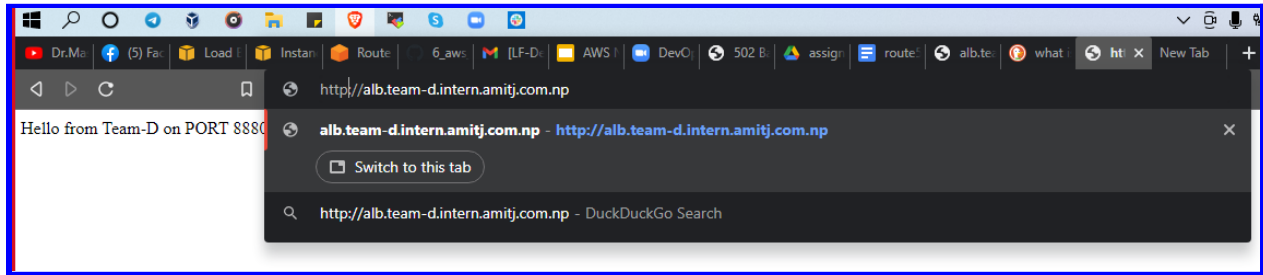
Listeners listen for connection requests using their protocol and port. You can add, remove, or update listeners and listener rules.

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

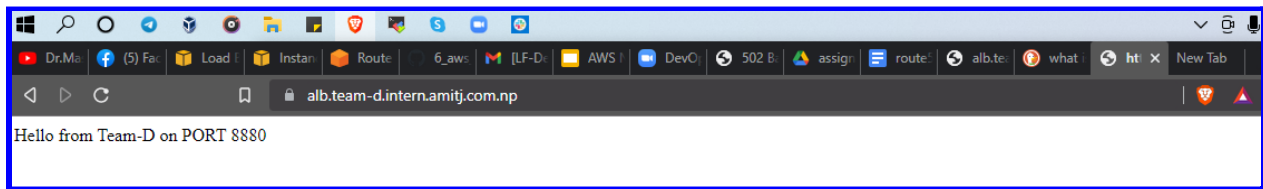
[Add listener](#) [Edit](#) [Delete](#)

Listener ID	Security policy	SSL Certificate	Rules
<input type="checkbox"/> HTTP : 80 arn...9bbf7fd3df9d9f23	N/A	N/A	Default: returning fixed response 503 View/edit rules
<input type="checkbox"/> HTTPS : 443 arn...525c3fc6c36ad6f5	ELBSecurityPolicy-2016-08	Default: f0826437-b934-47c4-954d-b66998c81bd0 (ACM) View/edit certificates	Default: forwarding to Team-D-LB-TG View/edit rules

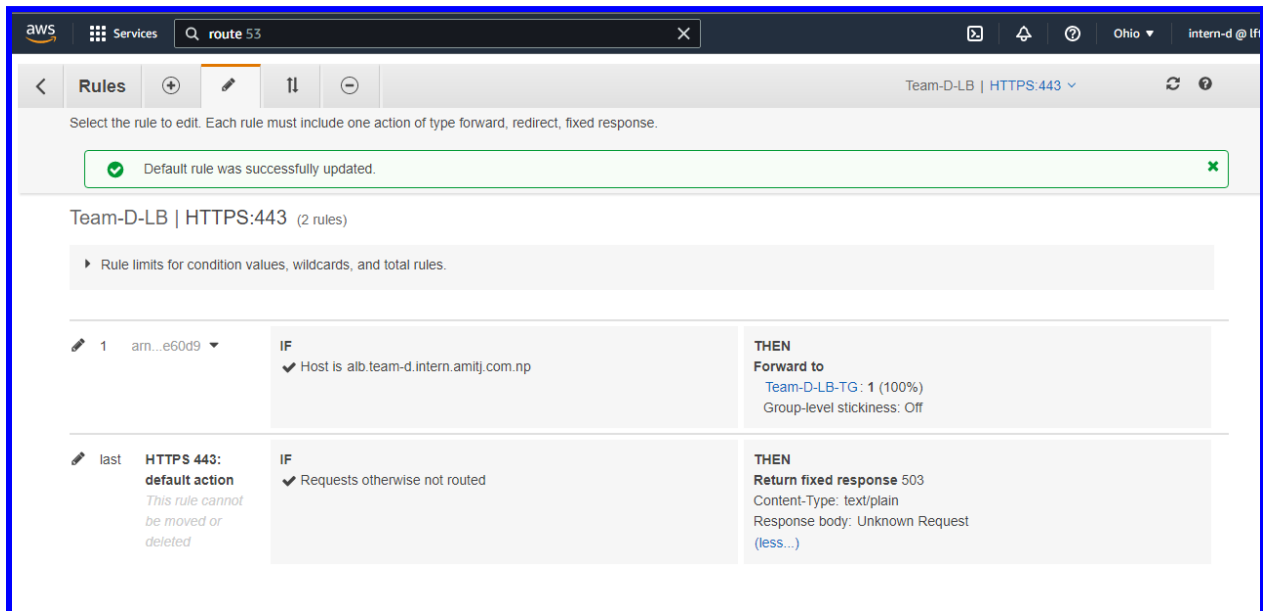
All request to http also get redirected to HTTPS



HTTPS result (even though browsing for http)



Also editing for other request then `alb.team-d.intern.amitj.com.np` in HTTPS listener



Result if we request for other than `alb.team-d.intern.amitj.com`

