Domain Name System Cloud Service

DNS Cloud Service –Amazon Route 53

- Domain Name System: translational tool
- Domain –distinct group of networked resources- jiit.ac.in
- Browser->URL->DNS Server
- Local DNS->ISP DNS and Public DNS
- Amazon Route 53 Cloud Service- register and associate name (cost attached)

Find a service by name or feature (for example, EC2, S3 or VM, storage).

Group

Server Migration Service
AWS Transfer for SFTP
Snowball
DataSync

MediaConnect
MediaConvert
MediaLive
MediaPackage
MediaStore
MediaTailor
Elemental Appliances & Software

AWS Amplify
Mobile Hub
AWS AppSync
Device Farm

Networking & Content Delivery

VPC
CloudFront
Route 53
API Gateway
Direct Connect
AWS App Mesh
AWS Cloud Map
Global Accelerator

Machine Learning

Amazon SageMaker
Amazon CodeGuru
Amazon Comprehend
Amazon Forecast
Amazon Fraud Detector

AR & VR

Amazon Sumerian

Application Integration

Step Functions
Amazon EventBridge
Amazon MQ
Simple Notification Service
Simple Queue Service

Domain Registration (10-15 $/yr), DNS management, Traffic Management and Availability monitoring

Amazon Route 53

You can use Amazon Route 53 to register new domains, transfer existing domains, route traffic for your domains to your AWS and external resources, and monitor the health of your resources.

DNS management

ady have a domain name, such as
om, Route 53 can tell the Domain Name
NS) where on the Internet to find web
ail servers, and other resources for your

re

Get started now

Traffic management

Route 53 traffic flow provides a visual tool that you can use to create and update sophisticated routing policies to route end users to multiple endpoints for your application.
Learn More

Get started now

Availability monitoring

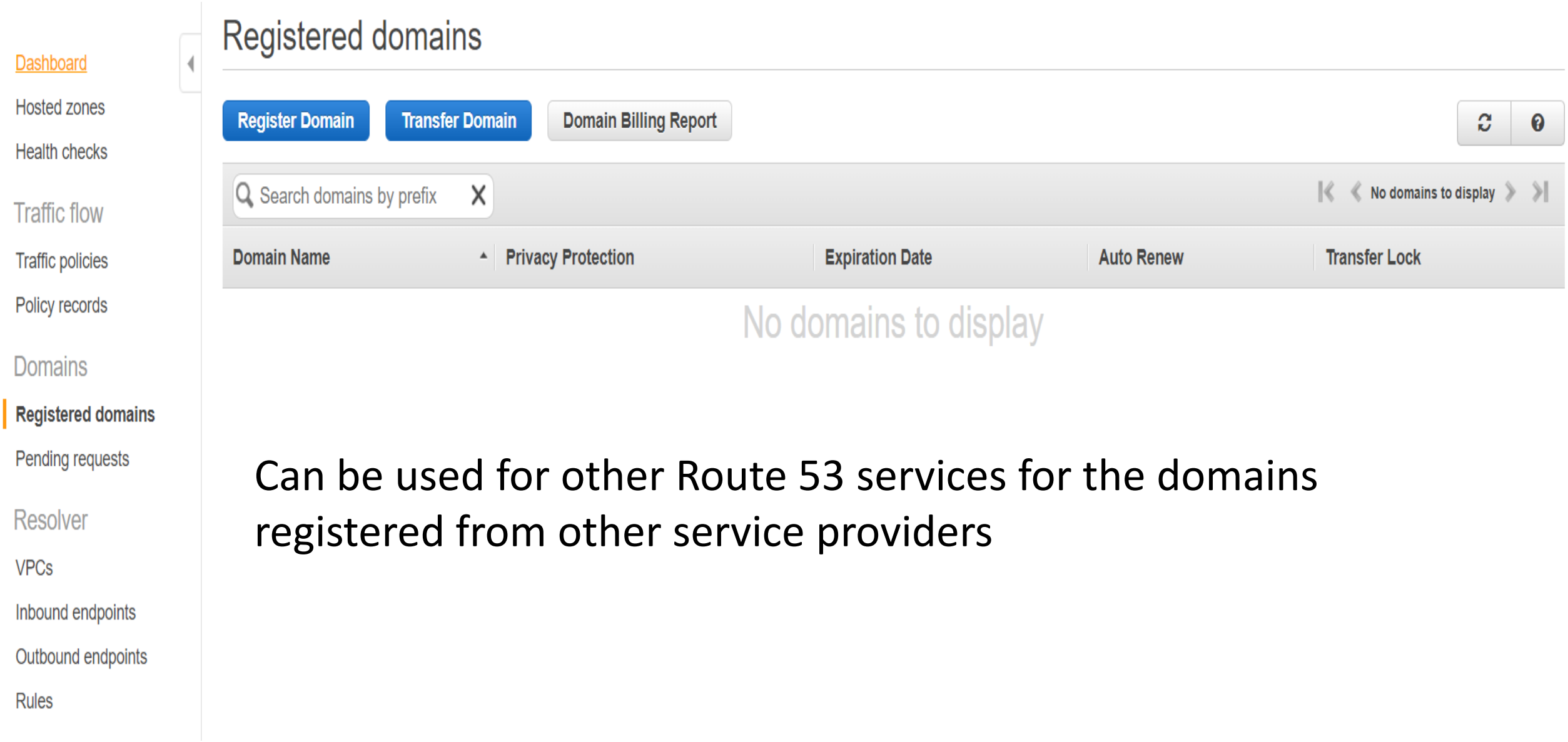
Route 53 can monitor the health and performance of your application as well as your web servers and other resources. Route 53 can also redirect traffic to healthy resources.
Learn More

Get started now

Domain registration

If you need a domain name, you can find an available name and register it by using Route 53. You can also make Route 53 the registrar for existing domains that you registered with other registrars.
Learn More

Get started now



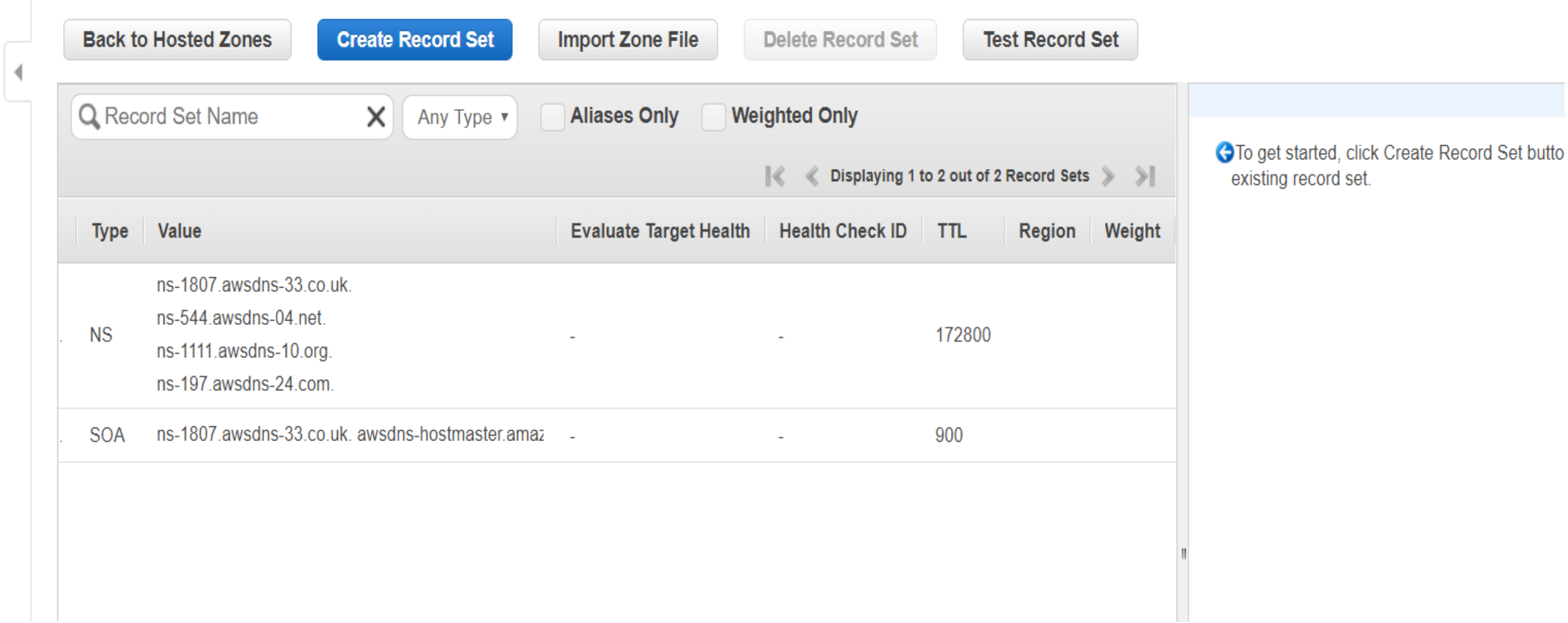
Can be used for other Route 53 services for the domains registered from other service providers

Create Hosted Zone | Go to Record Sets | Delete Hosted Zone

Amazon Route 53 is an authoritative Domain Name System (DNS) service. DNS is the system that translates human-readable domain names (example.com) into IP addresses (192.0.2.0). With authoritative name servers in data centers all over the world, Route 53 is reliable, scalable, and fast.

If you already have a domain name, such as example.com, Route 53 can tell the Domain Name System (DNS) where on the Internet to find web servers, mail servers, and other resources for your domain.
Learn More

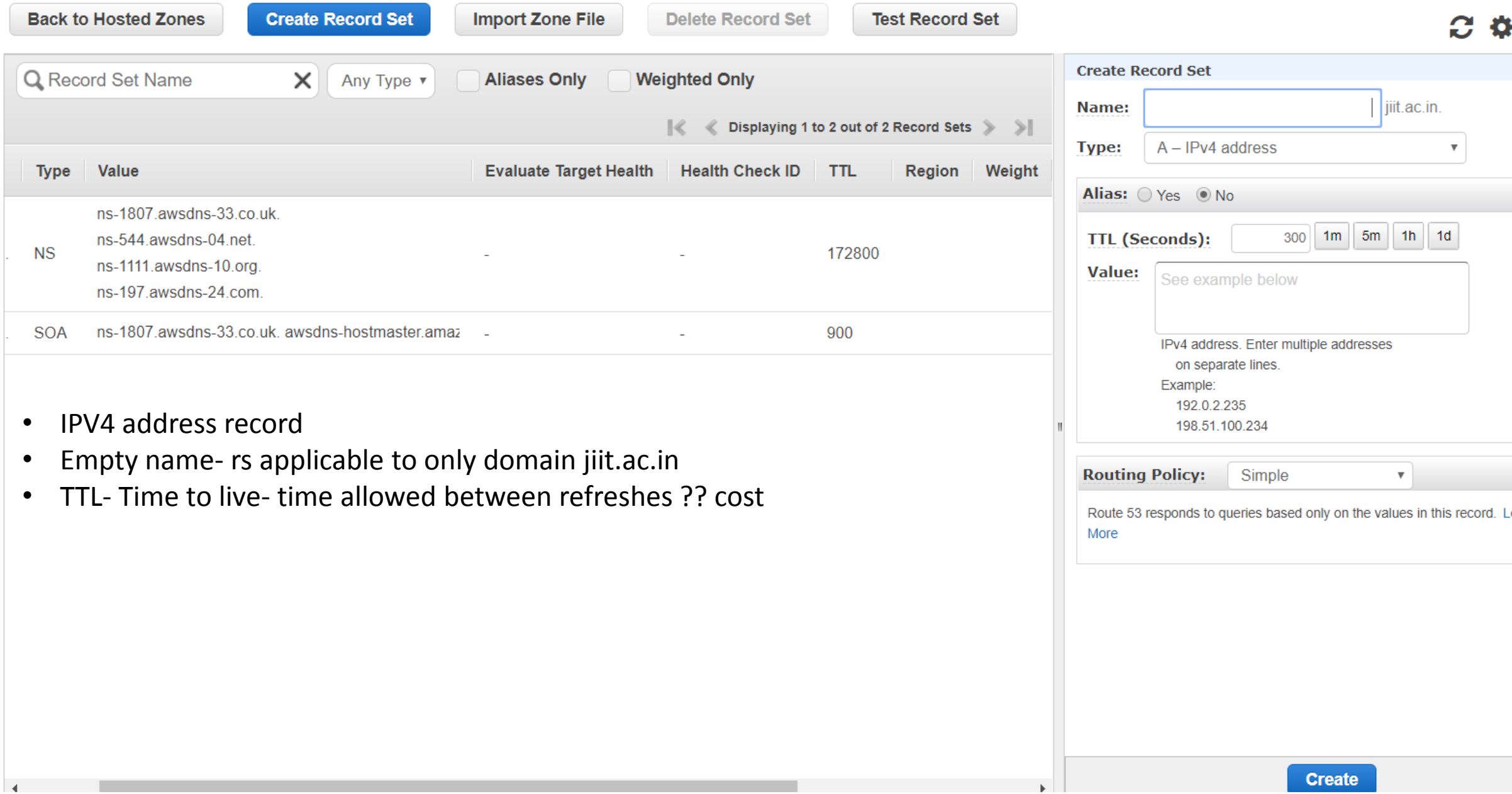
Create Hosted Zone



Hosted Zones-to define how to manage traffic aimed at your domain ($0.50 every month)

Record set-define aspect of domain behaviour

- SOA- start of authority domain basic configuration
- NS- List of authoritative name servers



- IPV4 address record
- Empty name- rs applicable to only domain jiit.ac.in
- TTL- Time to live- time allowed between refreshes ?? cost

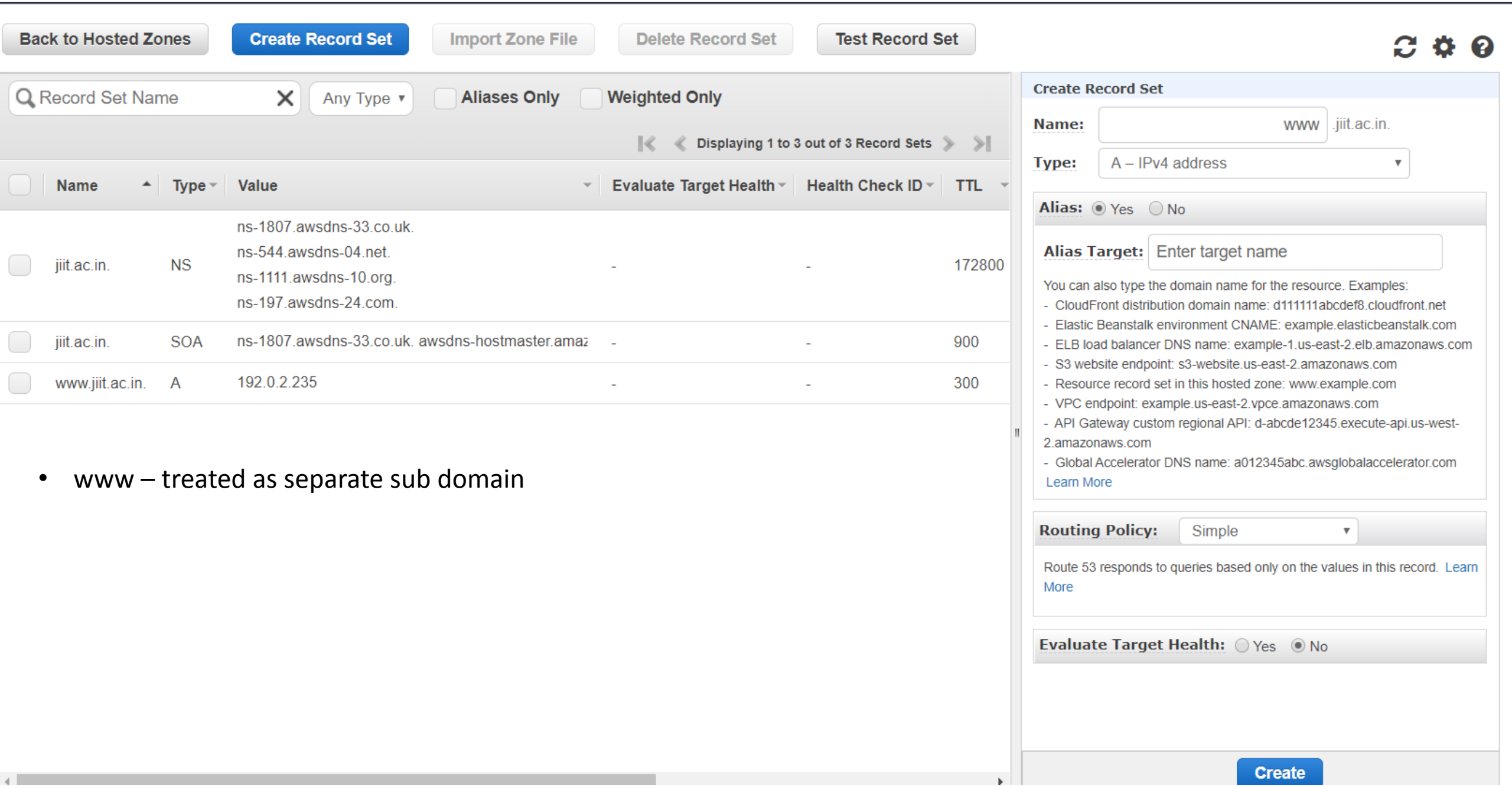
Back to Hosted Zones | Create Record Set | Import Zone File | Delete Record Set | Test Record Set

Record Set Name | Any Type | Aliases Only | Weighted Only

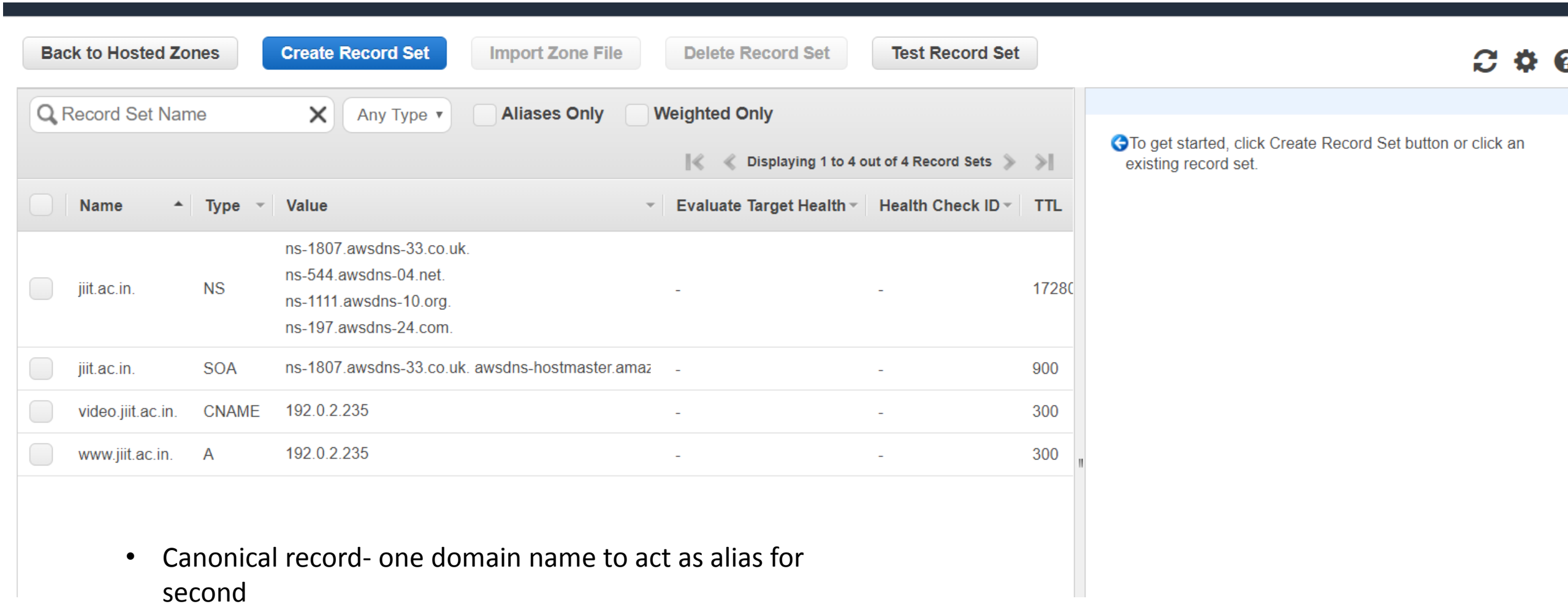
Displaying 1 to 3 out of 3 Record Sets

Name	Type	Value	Evaluate Target Health	Health Check ID	TTL
jiit.ac.in.	NS	ns-1807.awsdns-33.co.uk. ns-544.awsdns-04.net. ns-1111.awsdns-10.org. ns-197.awsdns-24.com.	-	-	172800
jiit.ac.in.	SOA	ns-1807.awsdns-33.co.uk. awsdns-hostmaster.amaz	-	-	900
www.jiit.ac.in.	A	192.0.2.235	-	-	300

To get started, click Create Record Set button or click an existing record set.



- www – treated as separate sub domain



- Canonical record- one domain name to act as alias for second
- Number of domains leads to a single website

Elastic IP addresses

Actions

Allocate Elastic IP address

Filter Elastic IP addresses

1

Name	Public IPv4 address	Allocation ID	Associated instance ID	Private IP address

No Elastic IP addresses found in this Region

Allocate Elastic IP address

Allocate an Elastic IP address by selecting the public IPv4 address pool from which the public IP address is to be allocated. Elastic IP addresses incur charges if they are not associated with a running instance or a network interface that is attached to a running instance. Learn more

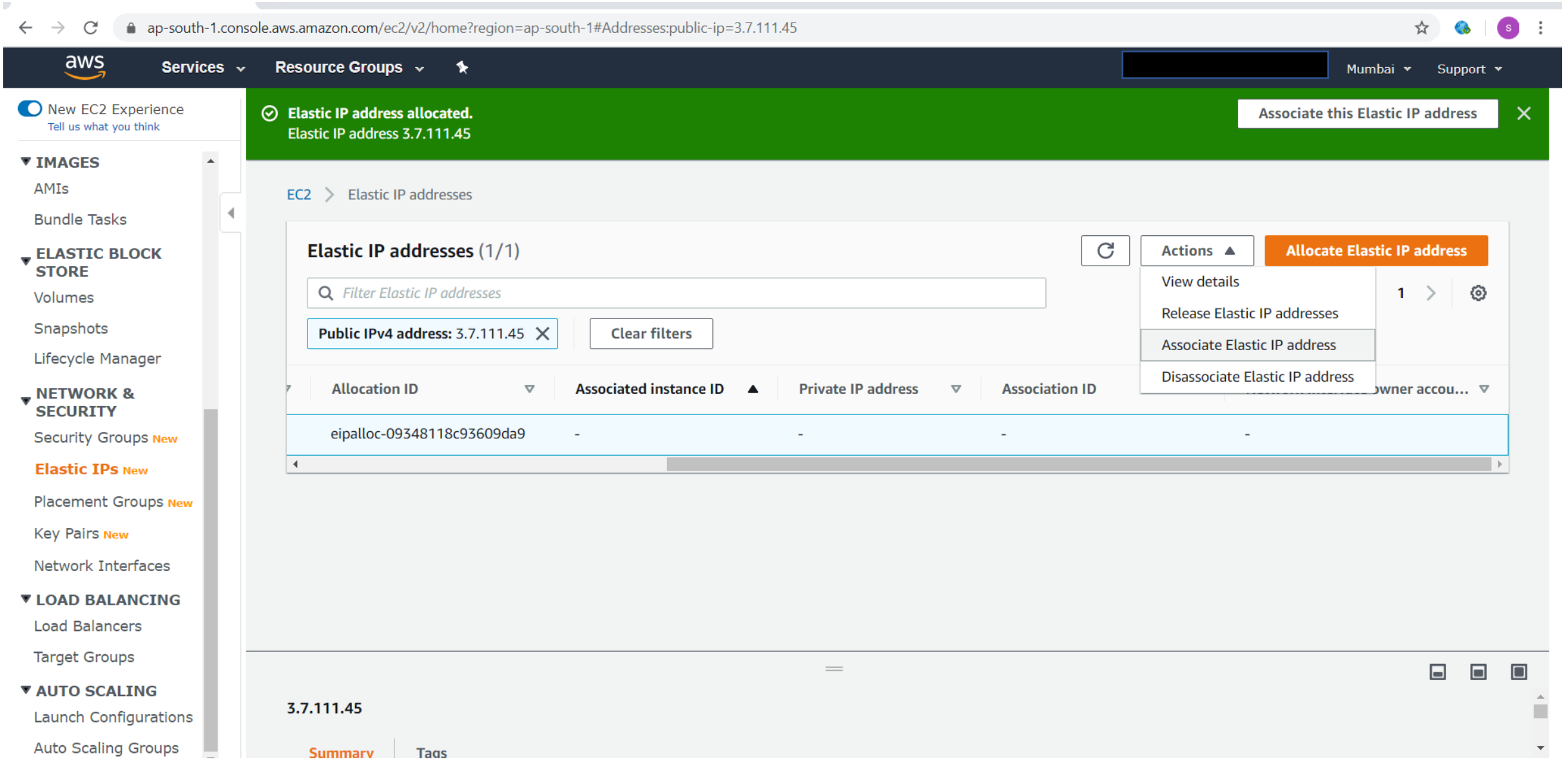
Elastic IP address settings

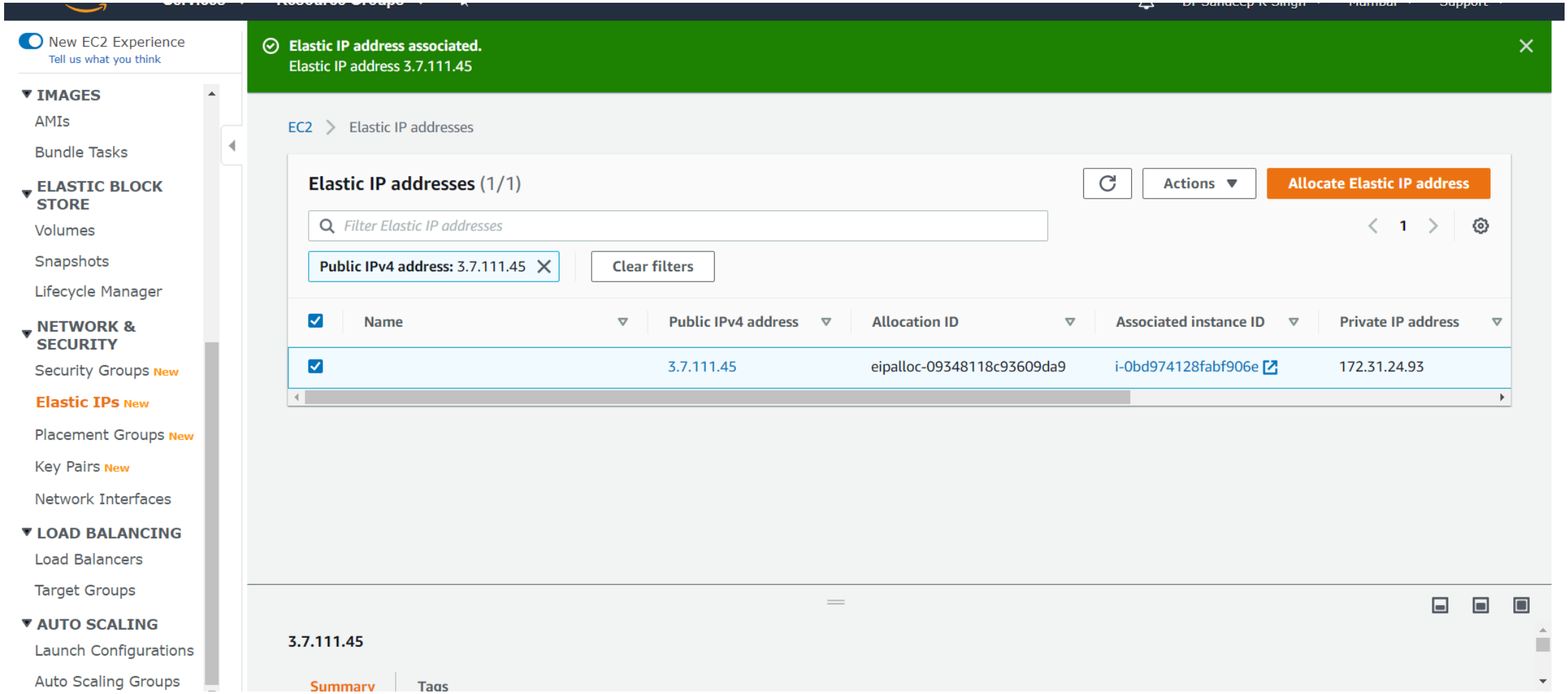
Public IPv4 address pool

Public IP addresses are allocated from Amazon's pool of public IP addresses, from a pool that you own and bring to your account, or from a pool that you own and continue to advertise..

- (•) Amazon's pool of IPv4 addresses
- ( ) Public IPv4 address that you bring to your AWS account(option disabled because no pools found) Learn more

Cancel Allocate


ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#Addresses:public-ip=3.7.111.45
aws
Services
Resource Groups
Mumbai
Support
New EC2 Experience
Tell us what you think
IMAGES
AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
Lifecycle Manager
NETWORK & SECURITY
Security Groups New
Elastic IPs New
Placement Groups New
Key Pairs New
Network Interfaces
LOAD BALANCING
Load Balancers
Target Groups
AUTO SCALING
Launch Configurations
Auto Scaling Groups
Elastic IP address allocated.
Elastic IP address 3.7.111.45
Associate this Elastic IP address
EC2 > Elastic IP addresses
Elastic IP addresses (1/1)
Actions
Allocate Elastic IP address
Filter Elastic IP addresses
Public IPv4 address: 3.7.111.45
Clear filters
View details
Release Elastic IP addresses
Associate Elastic IP address
Disassociate Elastic IP address
Allocation ID
Associated instance ID
Private IP address
Association ID
eipalloc-09348118c93609da9
3.7.111.45
Summary
Tags


New EC2 Experience
Tell us what you think
IMAGES
AMIs
Bundle Tasks
ELASTIC BLOCK STORE
Volumes
Snapshots
Lifecycle Manager
NETWORK & SECURITY
Security Groups New
Elastic IPs New
Placement Groups New
Key Pairs New
Network Interfaces
LOAD BALANCING
Load Balancers
Target Groups
AUTO SCALING
Launch Configurations
Auto Scaling Groups
Elastic IP address associated.
Elastic IP address 3.7.111.45
EC2 > Elastic IP addresses
Elastic IP addresses (1/1)
Actions
Allocate Elastic IP address
Filter Elastic IP addresses
1
Public IPv4 address: 3.7.111.45
Clear filters
Name
Public IPv4 address
Allocation ID
Associated instance ID
Private IP address
3.7.111.45
eipalloc-09348118c93609da9
i-0bd974128fabf906e
172.31.24.93
3.7.111.45
Summary
Tags

Billing & Cost Management Dashboard

Spend Summary

Cost Explorer

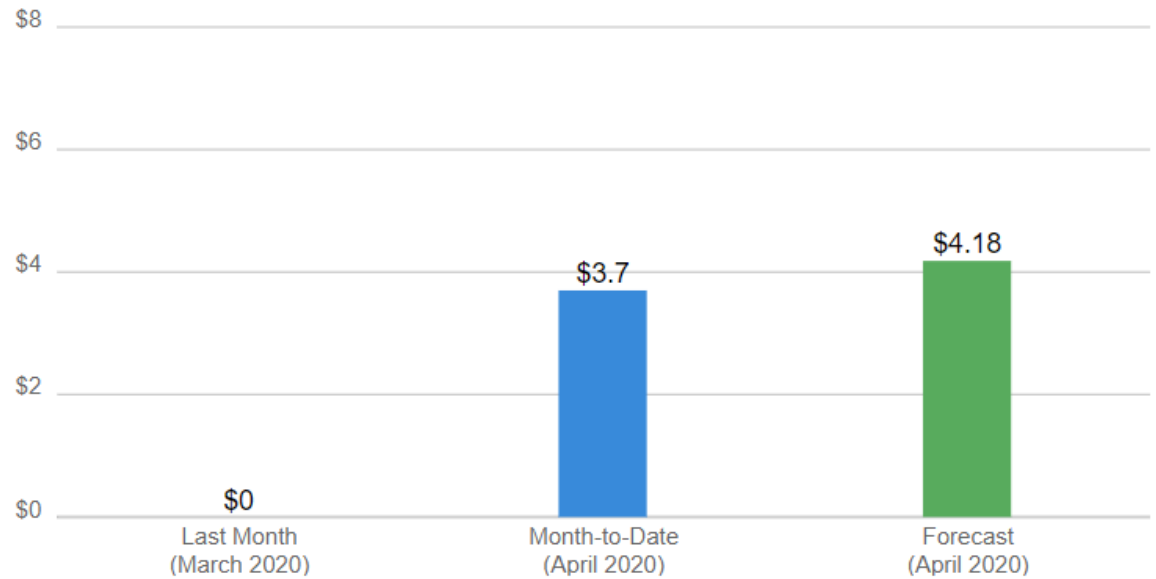
Welcome to the AWS Billing & Cost Management console. Your last month, month-to-date, and month-end forecasted costs appear below.

Current month-to-date balance for April 2020, the exchange rate for the Payment Currency is estimated.

3.70 USD which converts to

287.13 INR

at today's exchange rate of 77.602138

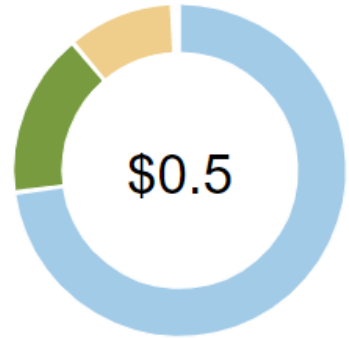


▶ Important Information about these Costs

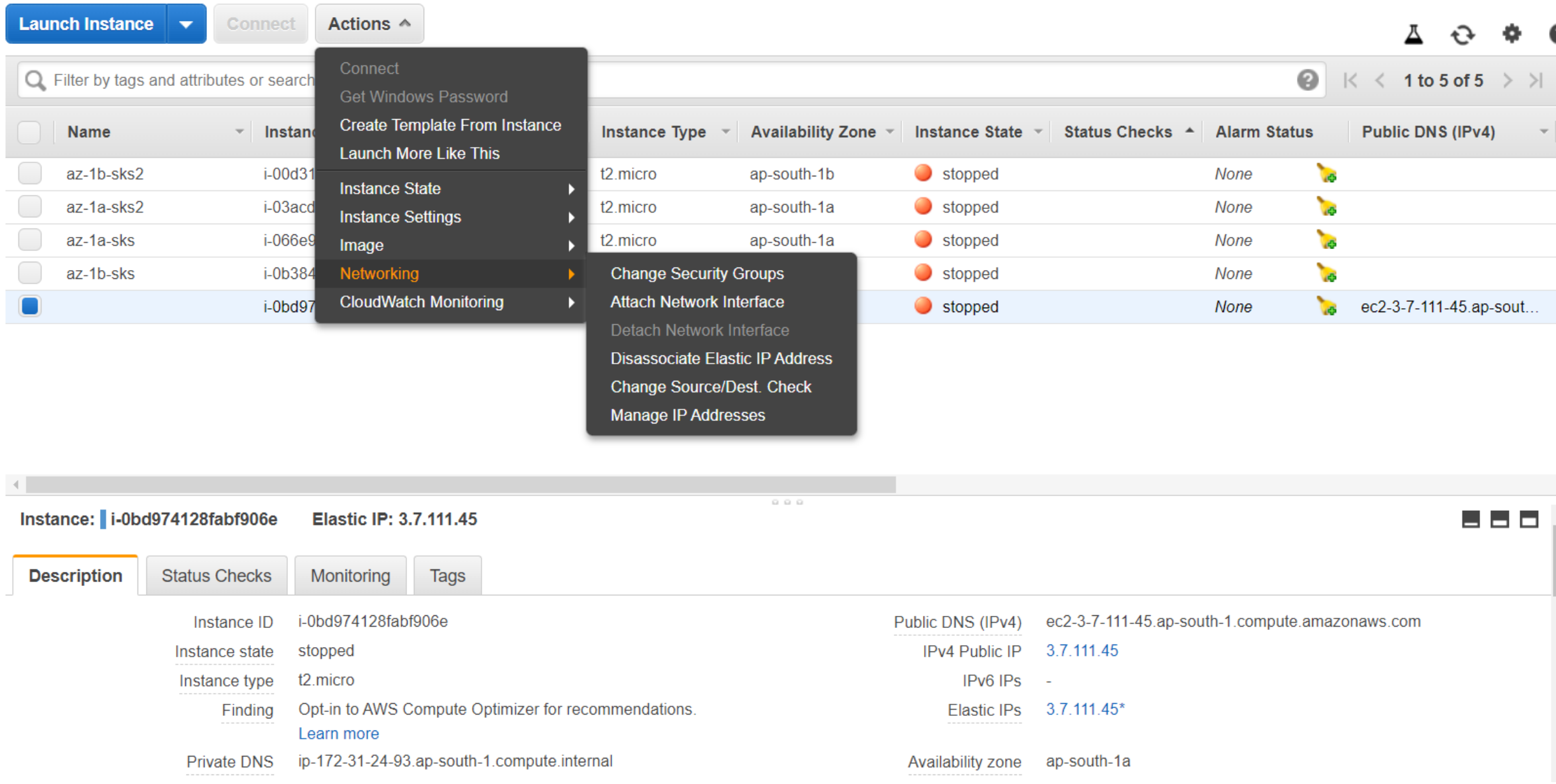
Month-to-Date Spend by Service

Bill Details

The chart below shows the proportion of costs spent for each service you use.



EC2	$2.31
Route53	$0.50
RDS	$0.32
Budgets	$0.00
Other Services	$0.00
Tax	$0.57
Total	**$3.70**

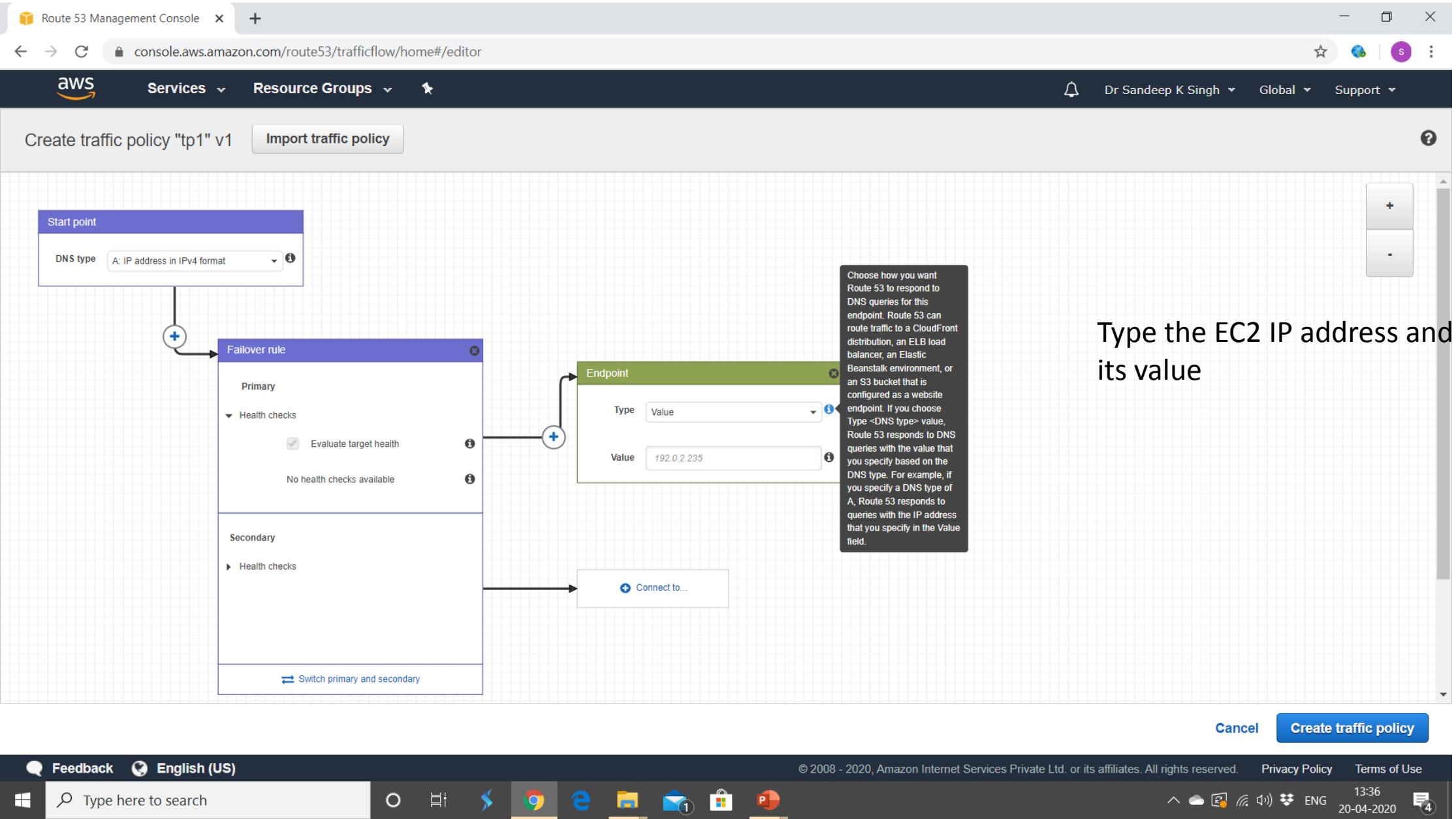

Launch Instance
Connect
Actions
Connect
Get Windows Password
Create Template From Instance
Launch More Like This
Instance State
Instance Settings
Image
Networking
CloudWatch Monitoring
Change Security Groups
Attach Network Interface
Detach Network Interface
Disassociate Elastic IP Address
Change Source/Dest. Check
Manage IP Addresses
Filter by tags and attributes or search
1 to 5 of 5
Name
Instance Type
Availability Zone
Instance State
Status Checks
Alarm Status
Public DNS (IPv4)
az-1b-sks2
t2.micro
ap-south-1b
stopped
None
az-1a-sks2
t2.micro
ap-south-1a
stopped
None
az-1a-sks
t2.micro
ap-south-1a
stopped
None
az-1b-sks
stopped
None
stopped
None
ec2-3-7-111-45.ap-sout...
Instance: i-0bd974128fabf906e
Elastic IP: 3.7.111.45
Description
Status Checks
Monitoring
Tags
Instance ID
i-0bd974128fabf906e
Instance state
stopped
Instance type
t2.micro
Finding
Opt-in to AWS Compute Optimizer for recommendations.
Learn more
Private DNS
ip-172-31-24-93.ap-south-1.compute.internal
Public DNS (IPv4)
ec2-3-7-111-45.ap-south-1.compute.amazonaws.com
IPv4 Public IP
3.7.111.45
IPv6 IPs
-
Elastic IPs
3.7.111.45*
Availability zone
ap-south-1a

Routing Policies- Multiple Servers Use Case

- Two servers- same content different capacities
- Rules for load sharing, disaster management- health checks and RP
- Simple RP- single server based
- Weighted RP- direct higher or lower loads
- Latency RP- to direct to server with low latency
- Failover RP- redirect traffic to backup server
- Geolocation RP- AZ close to the user

Create traffic policy "tp1" v1 | Import traffic policy

Cancel | Create traffic policy


Route 53 Management Console
console.aws.amazon.com/route53/trafficflow/home#/editor
Services
Resource Groups
Dr Sandeep K Singh
Global
Support
Create traffic policy "tp1" v1
Import traffic policy
Start point
DNS type
A: IP address in IPv4 format
Failover rule
Primary
Health checks
Evaluate target health
No health checks available
Secondary
Health checks
Switch primary and secondary
Endpoint
Type
Value
Value
192.0.2.235
Choose how you want Route 53 to respond to DNS queries for this endpoint. Route 53 can route traffic to a CloudFront distribution, an ELB load balancer, an Elastic Beanstalk environment, or an S3 bucket that is configured as a website endpoint. If you choose Type <DNS type> value, Route 53 responds to DNS queries with the value that you specify based on the DNS type. For example, if you specify a DNS type of A, Route 53 responds to queries with the IP address that you specify in the Value field.
Connect to...
Type the EC2 IP address and its value
Cancel
Create traffic policy
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
13:36
20-04-2020