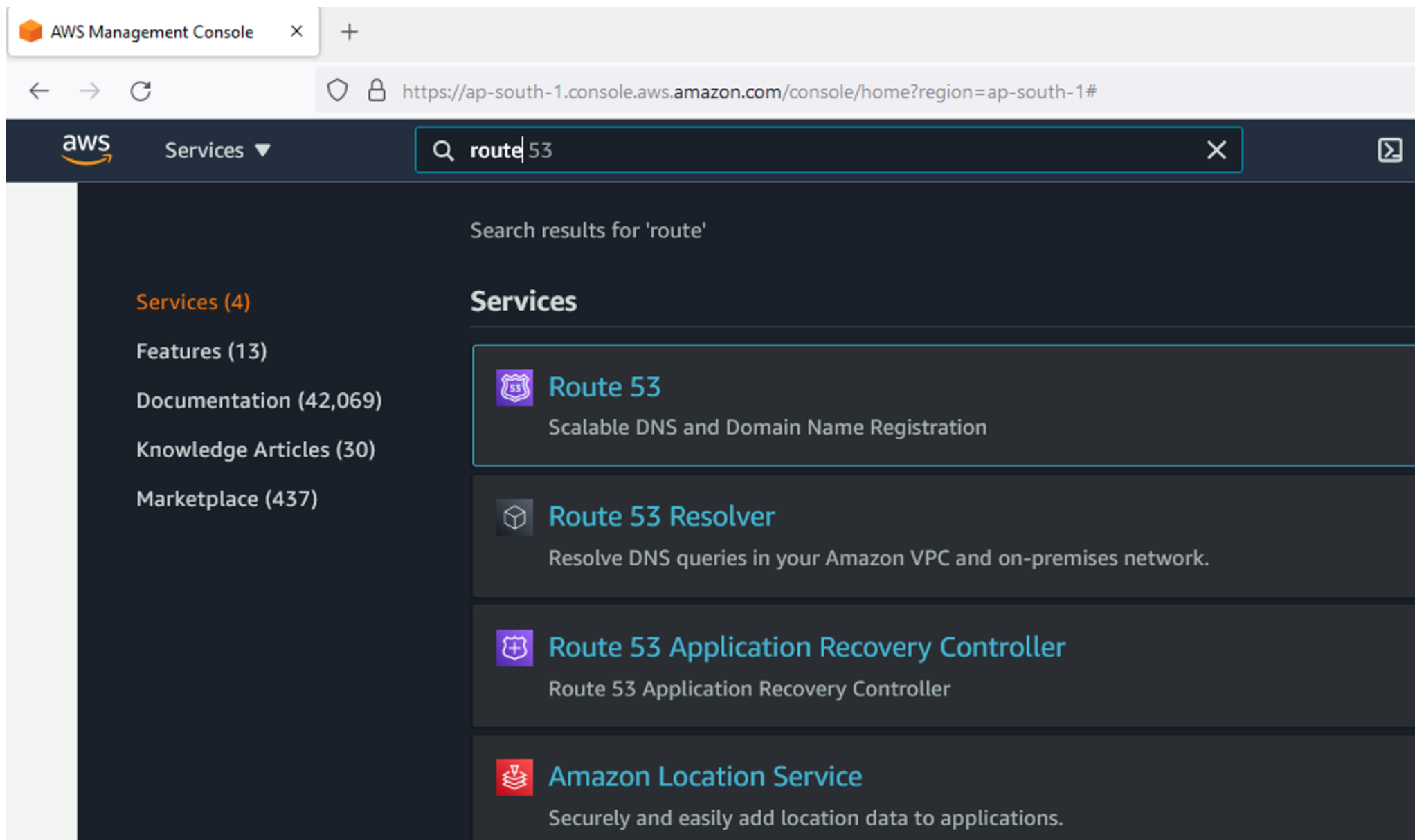


AWS Route53 Hands On

(Domain Registration, Hosted Zones, Routing Policies and Health Checks)

AWS Route 53







The screenshot shows the AWS Management Console interface. At the top, the browser tab is labeled 'AWS Management Console'. The address bar shows the URL 'https://ap-south-1.console.aws.amazon.com/console/home?region=ap-south-1#'. The AWS logo and 'Services' dropdown are on the left. A search bar contains the text 'route53'. Below the search bar, the text 'Search results for 'route'' is displayed. On the left sidebar, there are links for 'Services (4)', 'Features (13)', 'Documentation (42,069)', 'Knowledge Articles (30)', and 'Marketplace (437)'. The main content area, titled 'Services', lists four results: 'Route 53' (Scalable DNS and Domain Name Registration), 'Route 53 Resolver' (Resolve DNS queries in your Amazon VPC and on-premises network.), 'Route 53 Application Recovery Controller' (Route 53 Application Recovery Controller), and 'Amazon Location Service' (Securely and easily add location data to applications.). The 'Route 53' result is highlighted with a red border.

AWS Management Console

Services

Search results for 'route'

Services

-  **Route 53**
Scalable DNS and Domain Name Registration
-  **Route 53 Resolver**
Resolve DNS queries in your Amazon VPC and on-premises network.
-  **Route 53 Application Recovery Controller**
Route 53 Application Recovery Controller
-  **Amazon Location Service**
Securely and easily add location data to applications.

Route 53 Dashboard

Route 53



Dashboard

Hosted zones

Health checks

▼ Traffic flow

Traffic policies

Policy records

▼ Domains

Registered domains

Pending requests

▼ Resolver

VPCs

Inbound endpoints

Outbound endpoints

Route 53 > Dashboard

Route 53 Dashboard [Info](#)

DNS management

A hosted zone tells Route 53 how to respond to DNS queries for a domain such as example.com.

Create hosted zone

Availability monitoring

Health checks monitor your applications and web resources, and direct DNS queries to healthy resources.

Create health check

Readiness check

0

Traffic management

A visual tool that lets you easily create policies for multiple endpoints in complex configurations.

Create policy

Domain registration

A domain is the name, such as example.com, that your users use to access your application.

Register domain

Routing control

0

Domain Registration

1: Domain Search

2: Contact Details

3: Verify & Purchase

Choose a domain name

To register a domain name, start by finding one that's available (such as example.com), choose an extension (such as .com or .org), whether you can get it with other extensions. [Learn more.](#)

.com - \$12.00

Popular

.com - \$12.00

.net - \$11.00

.org - \$12.00

.com.au - \$15.00

.co.uk - \$9.00

.io - \$39.00

.info - \$21.00

.co - \$25.00

.de - \$9.00

Check

Cancel

Continue

Domain Registration

1: Domain Search

2: Contact Details

3: Verify & Purchase

Choose a domain name

To register a domain name, start by finding one that's available. Enter the first part of the name (such as example in example.com), choose an extension (such as .com or .org), and click Check. We'll tell you whether it's available and whether you can get it with other extensions. [Learn more.](#)

Domain Registration

1: Domain Search

2: Contact Details

3: Verify & Purchase

Choose a domain name

.com - \$12.00

Check

Availability for 'ocloudmaster.com'

| Domain Name | | Status | Price /1 Year | Action |
|------------------|---|-----------|---------------|------------------------|
| ocloudmaster.com | ✓ | Available | \$12.00 | <div>Add to cart</div> |

Related domain suggestions

| Domain Name | | Status | Price /1 Year | Action |
|------------------------|---|-----------|---------------|------------------------|
| creditocloudmaster.com | ✓ | Available | \$12.00 | <div>Add to cart</div> |
| ocloudmaster.link | ✓ | Available | \$5.00 | <div>Add to cart</div> |
| ocloudmaster.net | ✓ | Available | \$11.00 | <div>Add to cart</div> |
| ocloudmaster.org | ✓ | Available | \$12.00 | <div>Add to cart</div> |

Domain Registration

| | | | | |
|-----------------------|---|-----------|---------|-------------|
| ocloudmasterclass.com | ✓ | Available | \$12.00 | Add to cart |
| ocloudmastertools.com | ✓ | Available | \$12.00 | Add to cart |
| onetmaster.com | ✓ | Available | \$12.00 | Add to cart |
| otechmaster.com | ✓ | Available | \$12.00 | Add to cart |
| otechmaster.net | ✓ | Available | \$11.00 | Add to cart |
| payocloudmaster.com | ✓ | Available | \$12.00 | Add to cart |
| payocloudmaster.net | ✓ | Available | \$11.00 | Add to cart |

Cancel

Continue

Domain Registration

1: Domain Search

2: Contact Details

3: Verify & Purchase

Choose a domain name

.com - \$12.00

▼

Check

Availability for 'ocloudmaster.com'

| Domain Name | | Status | Price /1 Year | Action |
|------------------|---|---------------------|---------------|------------------------|
| ocloudmaster.com | ✓ | Available - In Cart | \$12.00 | <div>Add to cart</div> |

Related domain suggestions

| Domain Name | | Status | Price /1 Year | Action |
|------------------------|---|-----------|---------------|------------------------|
| creditocloudmaster.com | ✓ | Available | \$12.00 | <div>Add to cart</div> |
| ocloudmaster.link | ✓ | Available | \$5.00 | <div>Add to cart</div> |

Shopping cart

One-time fees

ocloudmaster.com

Register for

1

 year \$12.00

SUBTOTAL

\$12.00

Monthly Fees for DNS Management

[View pricing details](#) for Route 53 queries and for the hosted zone that we create for each new domain.

Domain Registration

Amazon Route 53

Overview

Features ▾

Pricing

Resources

FAQs

[Products](#) / [Networking & Content Delivery](#) / [Amazon Route 53](#) / ...

Amazon Route 53 pricing

◀ PAGE CONTENT

Paying for What You Use

Hosted Zones and Records

Queries

Alias Queries

Traffic Flow

Health Checks

Route 53 Resolver Endpoints

Paying for What You Use

With Amazon Route 53, you don't have to pay any upfront fees or commit to the number of queries the service answers for your domain. Like with other AWS services, you pay as you go and only for what you use:

- Managing hosted zones: You pay a monthly charge for each hosted zone managed with Route 53.
- Serving DNS queries: You incur charges for every DNS query answered by the Amazon Route 53 service, except for queries to Alias A records that are mapped to Elastic Load Balancing instances, CloudFront distributions, AWS Elastic Beanstalk environments, API Gateways, VPC endpoints, or Amazon S3 website buckets, which are provided at no additional charge.
- Managing domain names: You pay an annual charge for each domain name registered via or transferred into Route 53.

Your monthly bill from AWS will list your total usage and dollar amount for the Amazon Route 53 service separately from other AWS services.

Domain Registration

Hosted Zones and Records

- \$0.50 per hosted zone / month for the first 25 hosted zones
- \$0.10 per hosted zone / month for additional hosted zones

The monthly hosted zone prices listed above are not prorated for partial months. A hosted zone is charged at the time it's created and on the first day of each subsequent month. To allow testing, a hosted zone that is deleted within 12 hours of creation is not charged, however, any queries on that hosted zone will still incur charges at the rates below.

An additional charge applies for a hosted zone that contains more than 10,000 records.

Need more than 500 hosted zones or more than 10,000 records in a hosted zone? Please [contact us](#).

Domain Registration

Queries

The following query prices are prorated; for example, a hosted zone with 100,000 standard queries / month would be charged \$0.04 and a hosted zone with 100,000 Latency-Based Routing queries / month would be charged \$0.06.

Standard Queries

- \$0.40 per million queries – first 1 Billion queries / month
- \$0.20 per million queries – over 1 Billion queries / month

Latency Based Routing Queries

- \$0.60 per million queries – first 1 Billion queries / month
- \$0.30 per million queries – over 1 Billion queries / month

Geo DNS and Geoproximity Queries

- \$0.70 per million queries -- first 1 Billion queries / month
- \$0.35 per million queries -- over 1 Billion queries / month

Domain Registration

Health Checks

Get Started With DNS Failover At No Additional Cost*

New and existing customers can create up to 50 health checks for AWS endpoints** that are within or linked to the same AWS account.

| | AWS Endpoints | Non-AWS Endpoints |
|--|-------------------------------------|-------------------------------------|
| Basic Health Checks | \$0.50* per health check / month | \$0.75 per health check / month |
| Optional health check features: HTTPS; String Matching; Fast Interval; Latency Measurement | \$1.00 / month per optional feature | \$2.00 / month per optional feature |

Domain Registration

Contact Details for Your 1 Domain

Enter the details for your Registrant, Administrative and Technical contacts below. All fields are required unless specified otherwise. [Learn more.](#)

My Registrant, Administrative and Technical Contacts are all the same: ☒ Yes ☐ No

Registrant Contact

Contact Type ⓘ

Person

First Name

Last Name

Organization ⓘ

Not applicable

Email

Phone

+ 1 · 3115550188

Enter country calling code and phone number

Domain Registration

Address 1

Street address, P.O. box

Address 2

Apt, suite, unit, building, floor, etc.

Country

State

City

Postal/Zip Code

Privacy Protection ⓘ

When the contact type is Person:

- Privacy protection hides **some** contact details for .com domains.

☒ Enable ☐ Disable

Cancel

Back

Continue

Create Hosted Zone

[Route 53](#) > [Hosted zones](#) > Create hosted zone

Create hosted zone [Info](#)

Hosted zone configuration

A hosted zone is a container that holds information about how you want to route traffic for a domain, such as example.com, and its subdomains.

Domain name [Info](#)

This is the name of the domain that you want to route traffic for.

Valid characters: a-z, 0-9, ! " # \$ % & ' () * + , - / : ; < = > ? @ [\] ^ _ ` { | } . ~

Description - optional [Info](#)

This value lets you distinguish hosted zones that have the same name.

The description can have up to 256 characters. 0/256

Create Hosted Zone

Type [Info](#)

The type indicates whether you want to route traffic on the internet or in an Amazon VPC.



Public hosted zone

A public hosted zone determines how traffic is routed on the internet.



Private hosted zone

A private hosted zone determines how traffic is routed within an Amazon VPC.

Tags [Info](#)

Apply tags to hosted zones to help organize and identify them.

No tags associated with the resource.

Add tag

You can add up to 50 more tags.

Cancel

Create hosted zone

Create Health Check

Create health check

Step 1: Configure health check

Step 2: Get notified when health check fails

Configure health check ?

Route 53 health checks let you track the health status of your resources, such as web servers or mail servers, and take action when an outage occurs.

Name

example name



What to monitor



Endpoint



Status of other health checks (calculated health check)



State of CloudWatch alarm

Create Health Check

Monitor an endpoint

Multiple Route 53 health checkers will try to establish a TCP connection with the following resource to determine whether it's healthy.

[Learn more](#)

Specify endpoint by ☒ IP address ☐ Domain name

Protocol HTTP 

IP address * 192.0.2.44 or 2001:DB8::1 

Host name www.example.com 

Port * 80 

Path / images 

► Advanced configuration

URL 

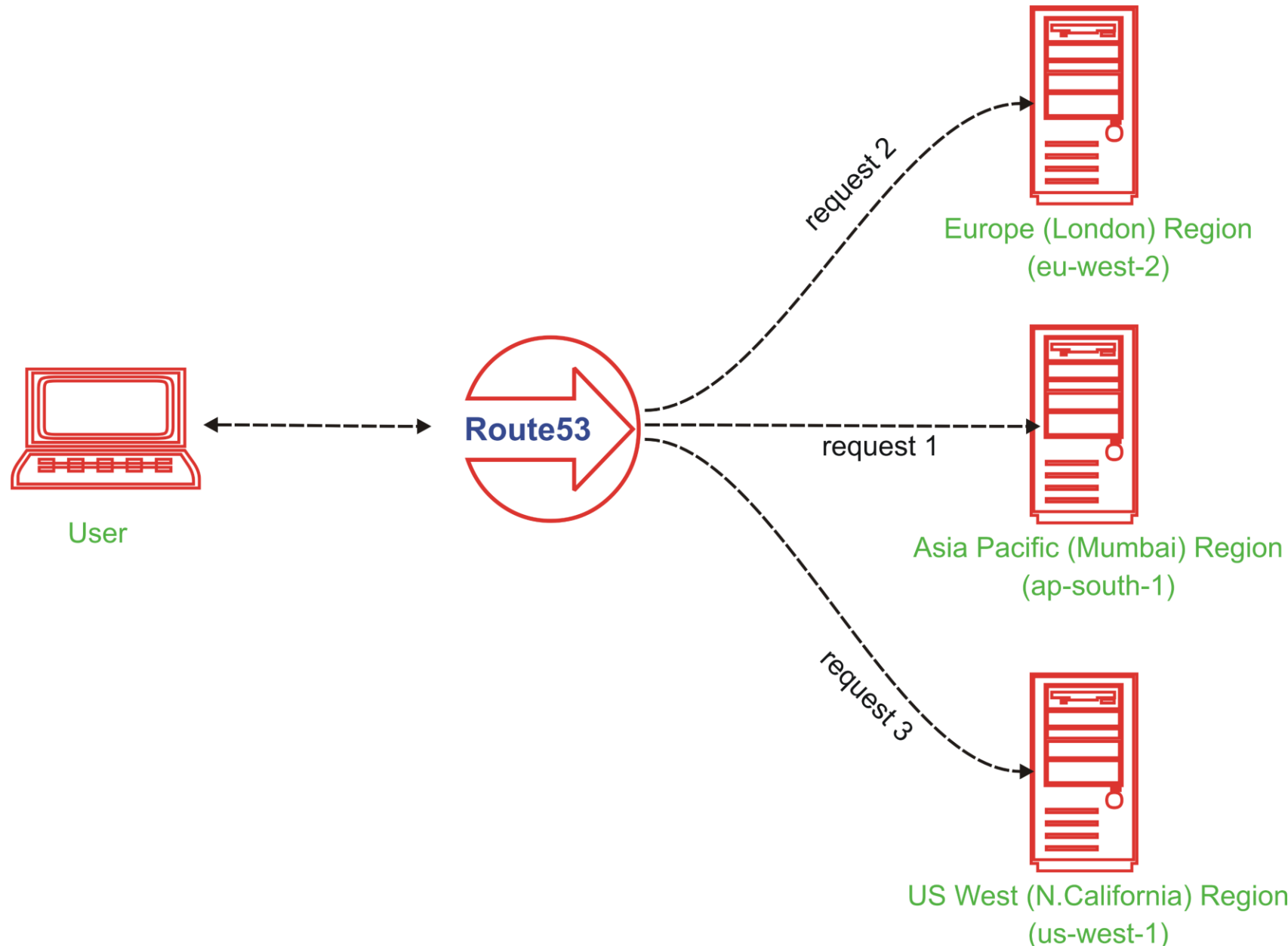
Health check type Basic - no additional options selected ([View Pricing](#))

* Required

[Cancel](#)

[Next](#)

Simple Routing Policy

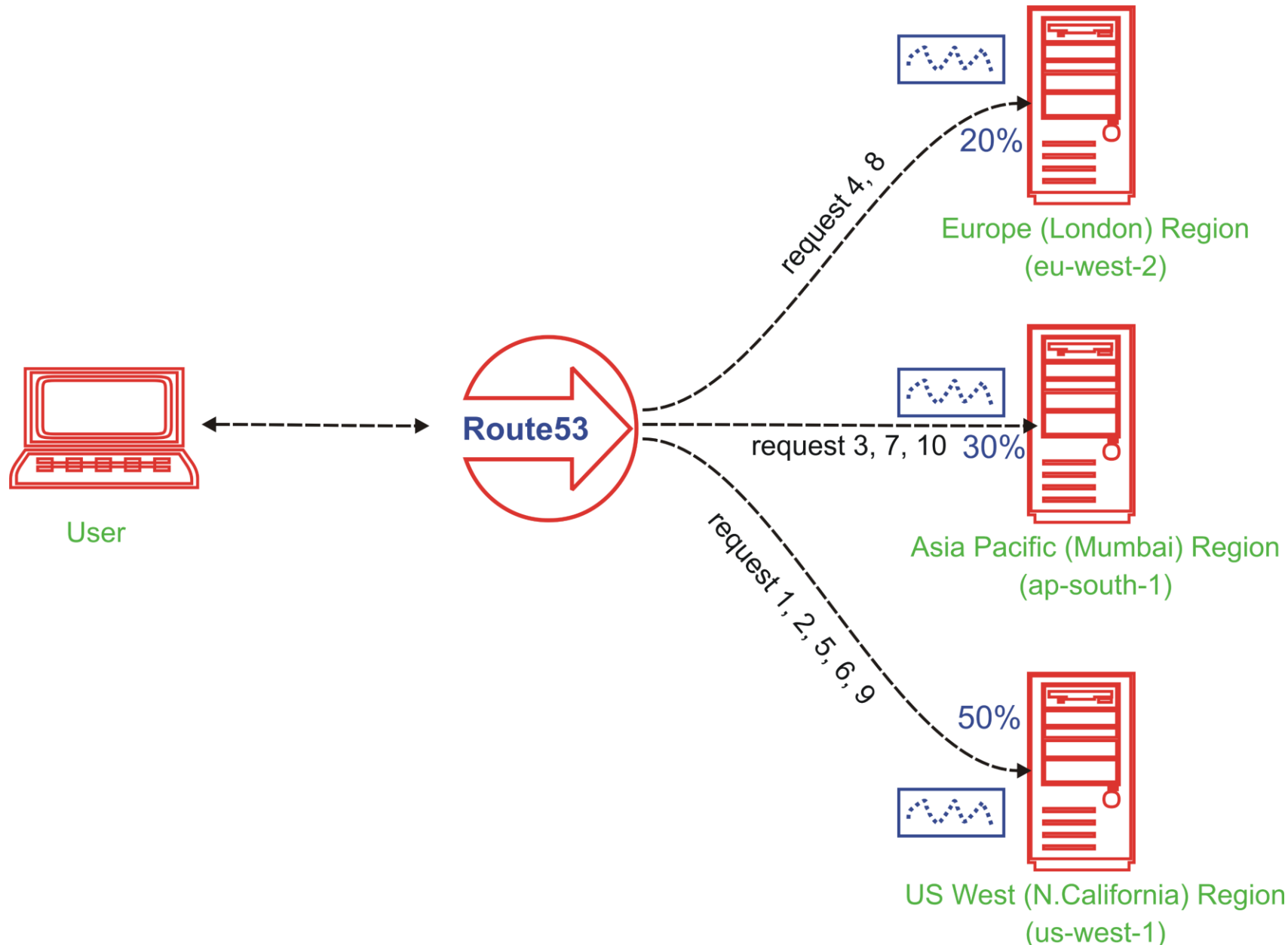


Use simple routing when you need to send the traffic to single resource. We can not use multiple records of same name and type but single record can have multiple values such as IP Addresses.

If multiple values are returned, a random one is chosen by client.

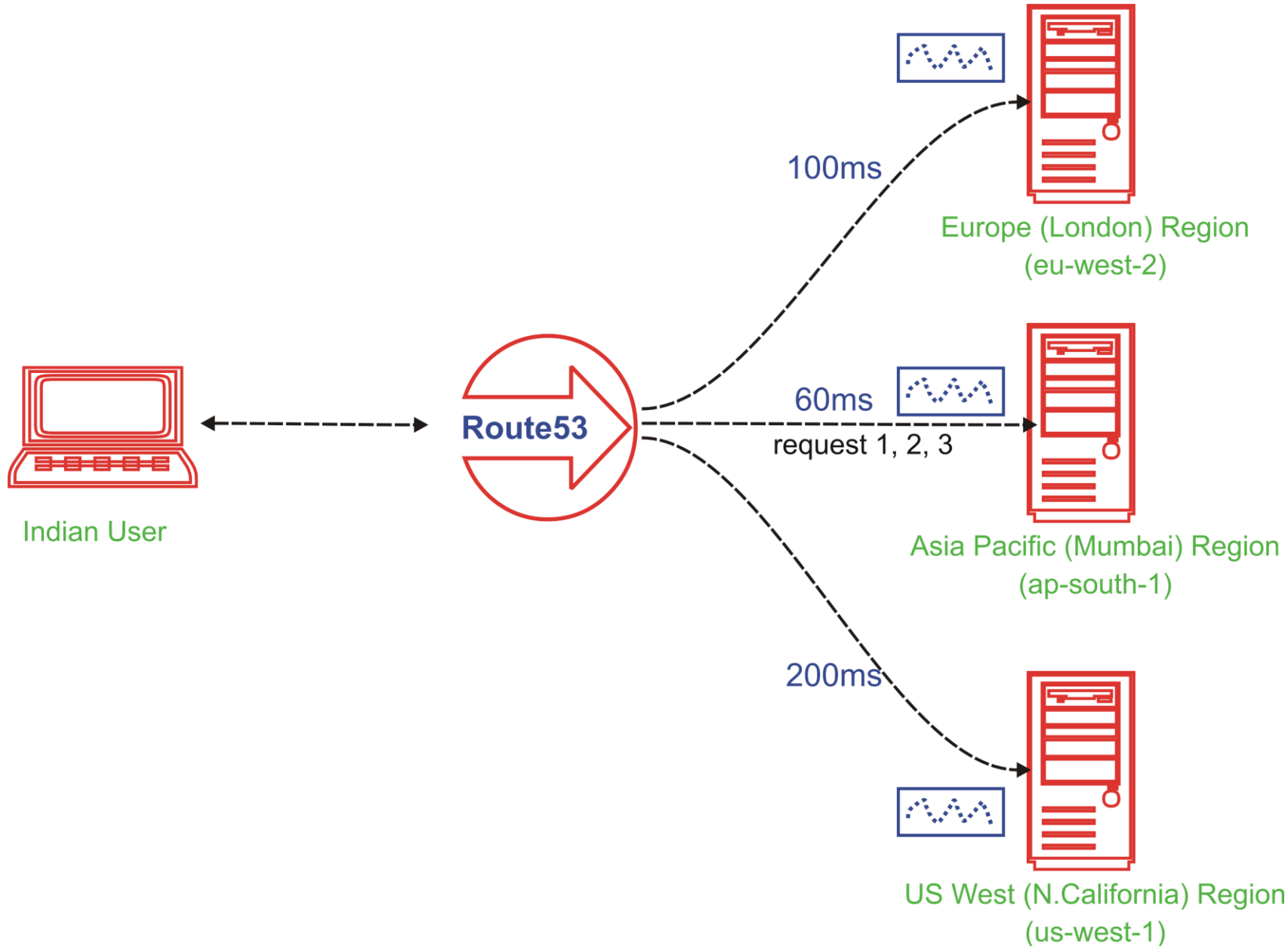
We can not use health checks in simple routing.

Weighted Routing Policy



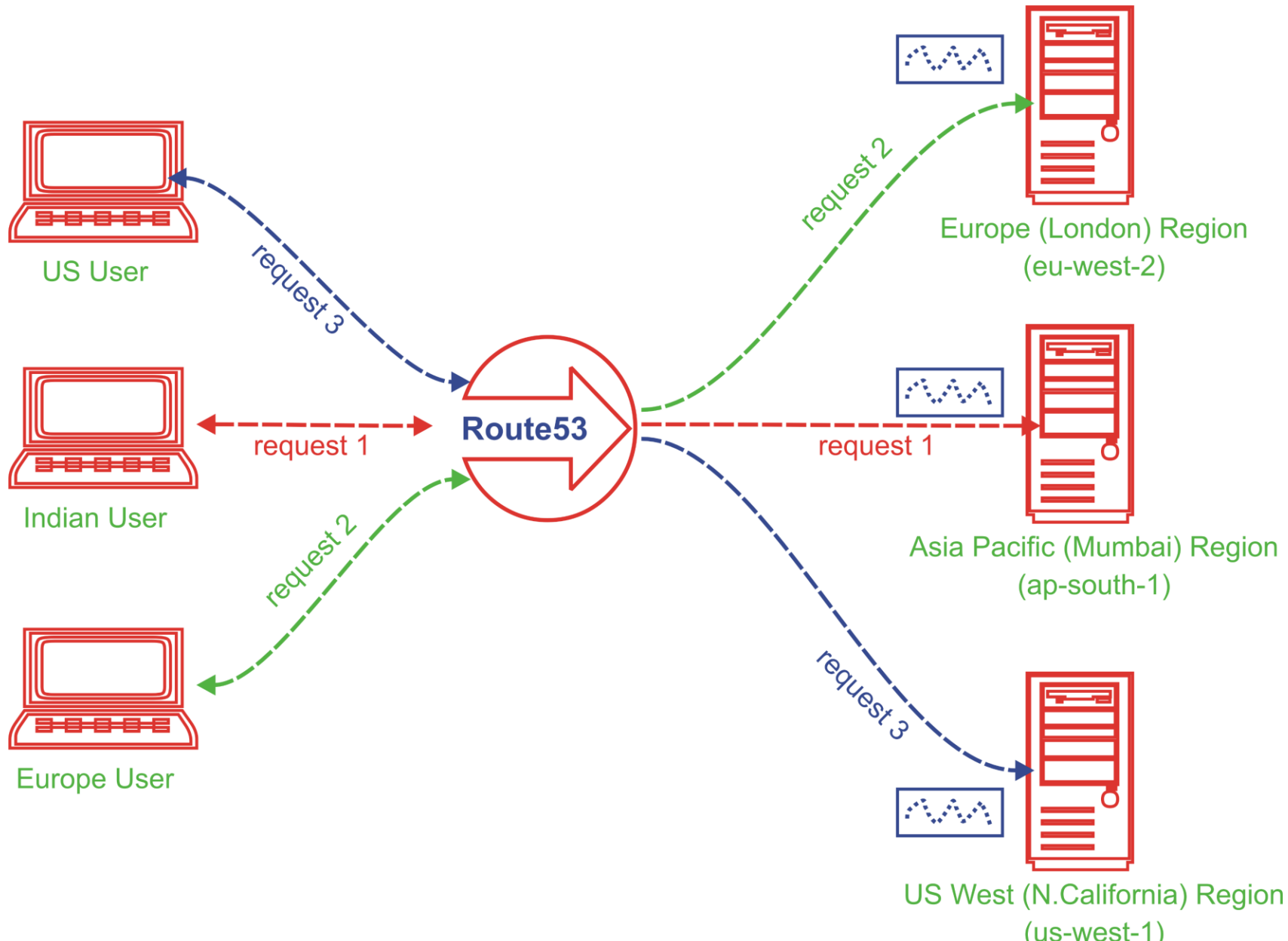
Can control how much traffic goes to specific resource. It is useful for load balancing and testing new versions of applications. We can associate health checks with weighted routing policy.

Latency Based Routing Policy



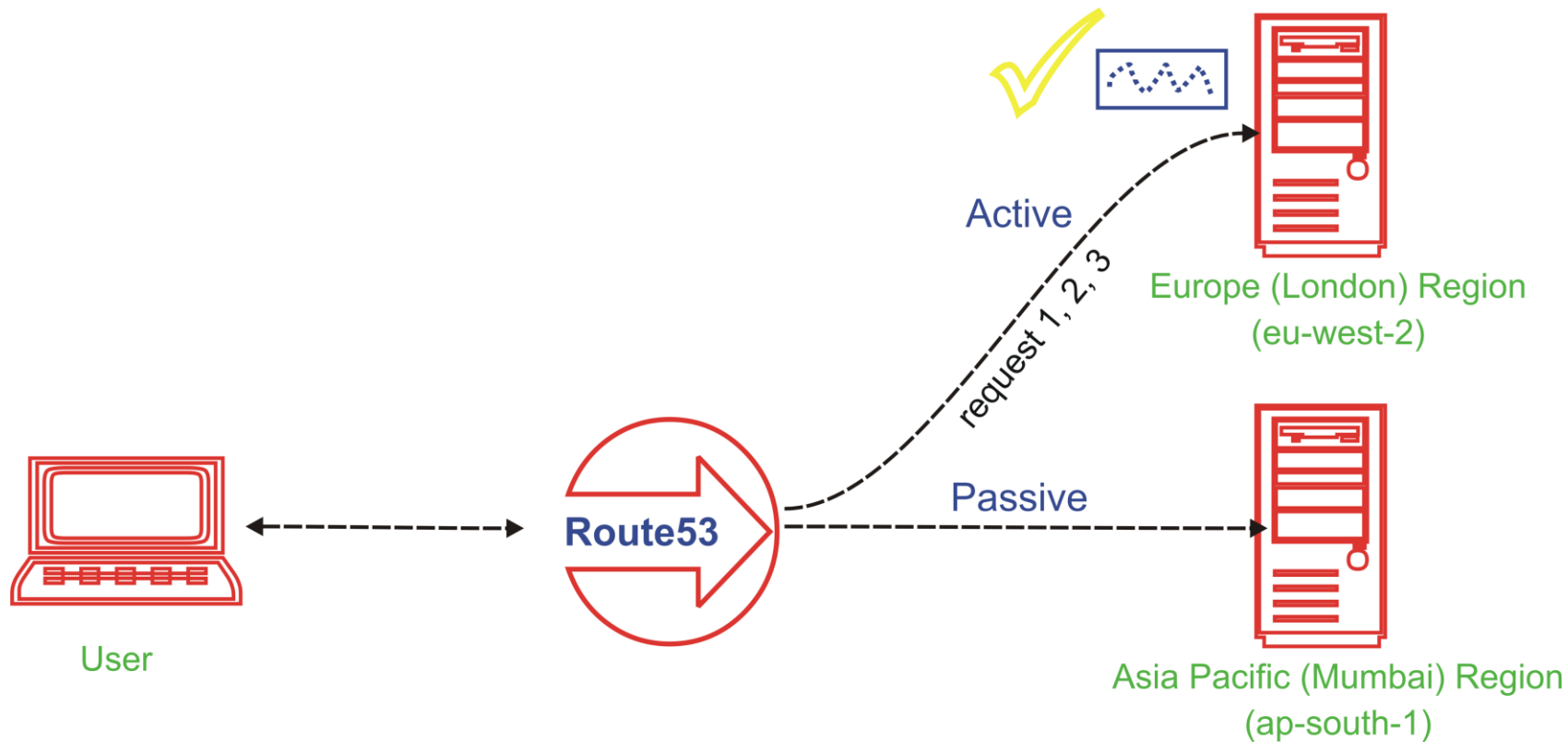
Use latency based routing when you need to send the traffic to resource having least latency. It provides faster user experience. We can associate health checks with latency based routing policy.

Geolocation Based Routing Policy



Use Geolocation based routing when you need to send the traffic to the resources based on location of your users. We can associate health checks with geolocation based routing policy.

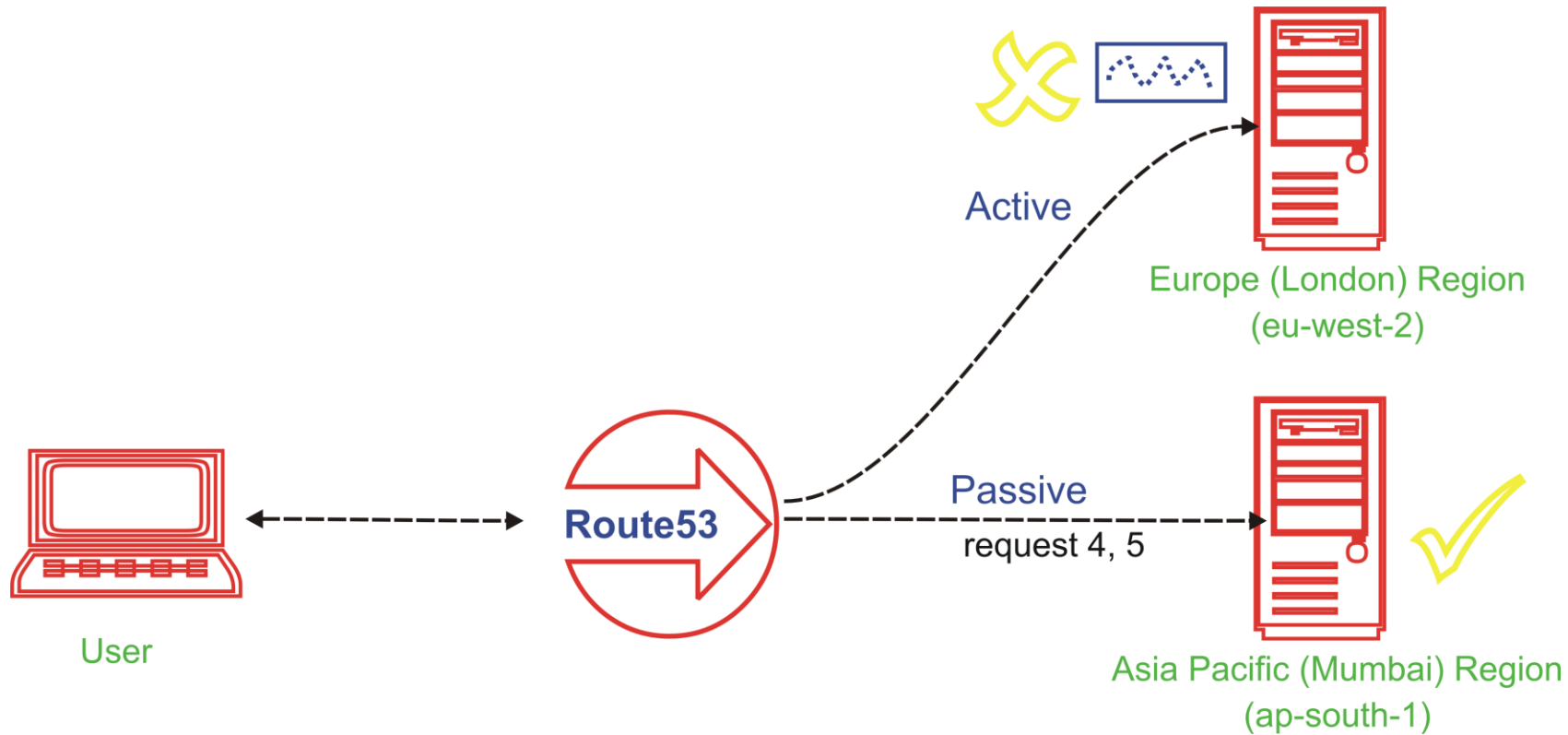
Failover Routing Policy



Use failover routing when you need to send the traffic to primary resource which is healthy. If primary resource becomes unhealthy, send to secondary (failover) resource.

The health checks on primary resource are mandatory. It is used when you want to perform active passive failover.

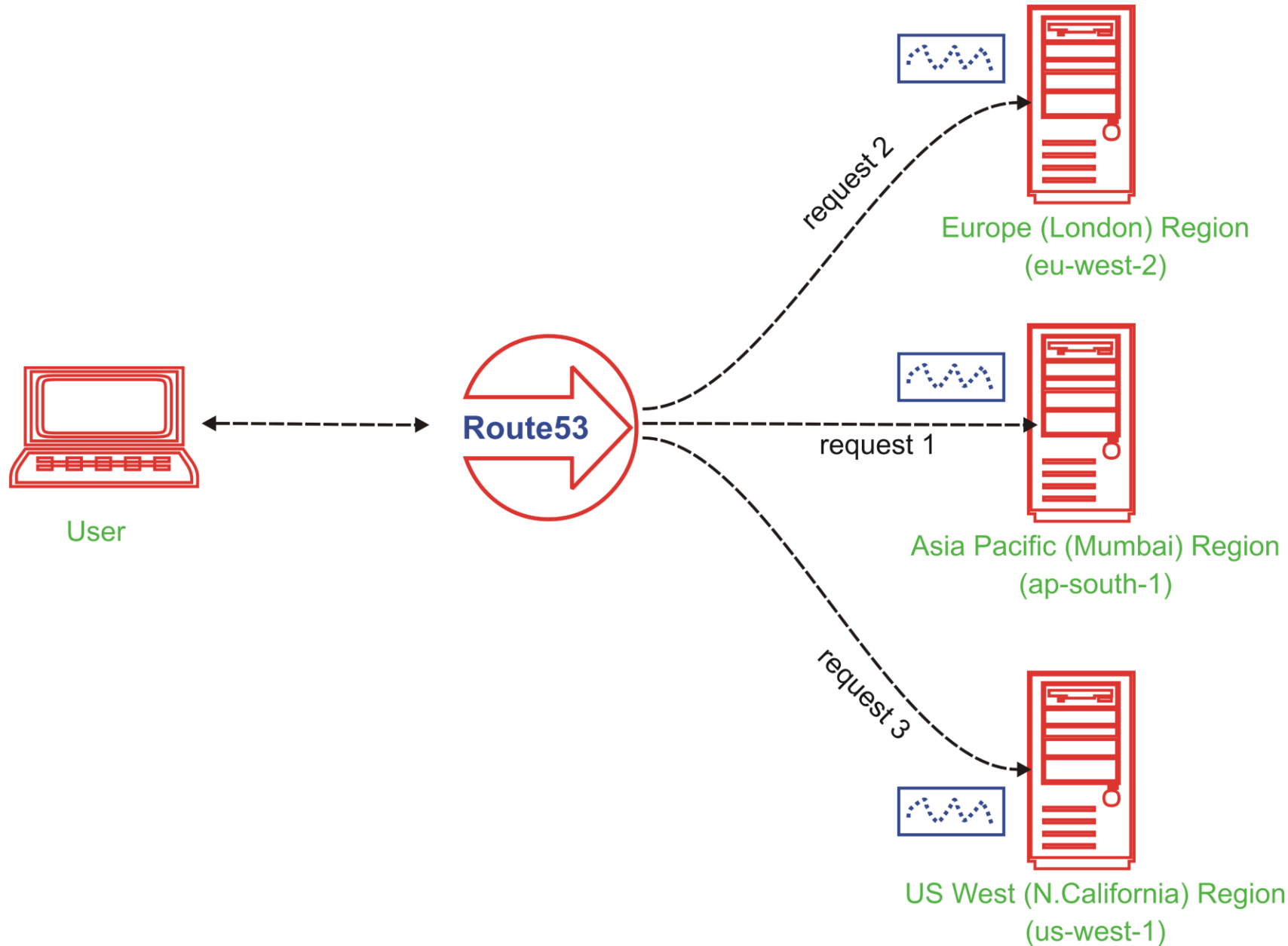
Failover Routing Policy



Use failover routing when you need to send the traffic to primary resource which is healthy. If primary resource becomes unhealthy, send to secondary (failover) resource.

The health checks on primary resource are mandatory. It is used when you want to perform active passive failover.

Multivalue Routing Policy



Use multivalue routing when you need to send the traffic to multiple resources. We can associate health checks with multivalue routing.