

Route 53 Routing Policies

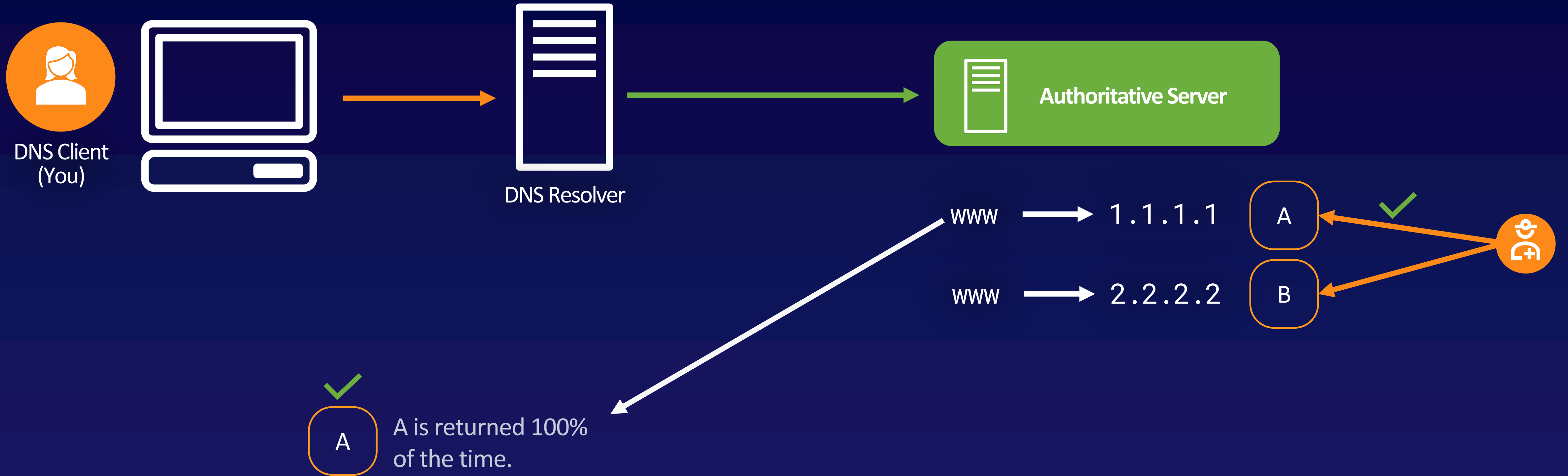
Part 2



Brock Tubre

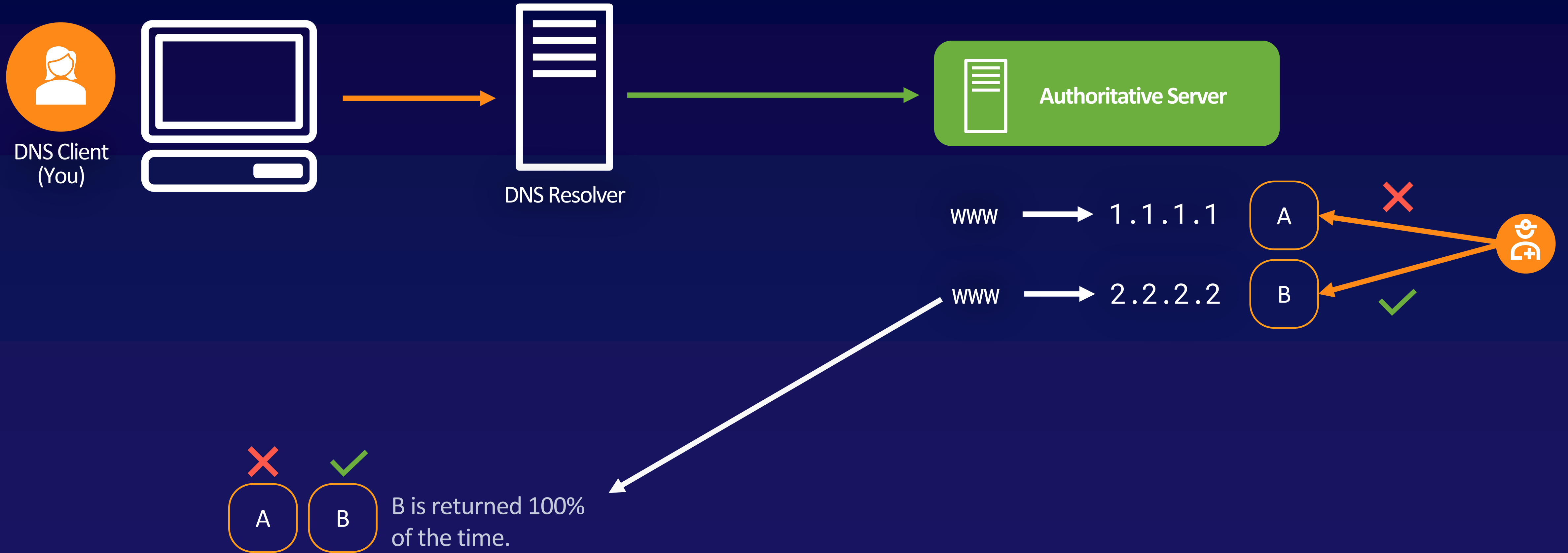
TECHNICAL INSTRUCTOR

Failover Routing Policy



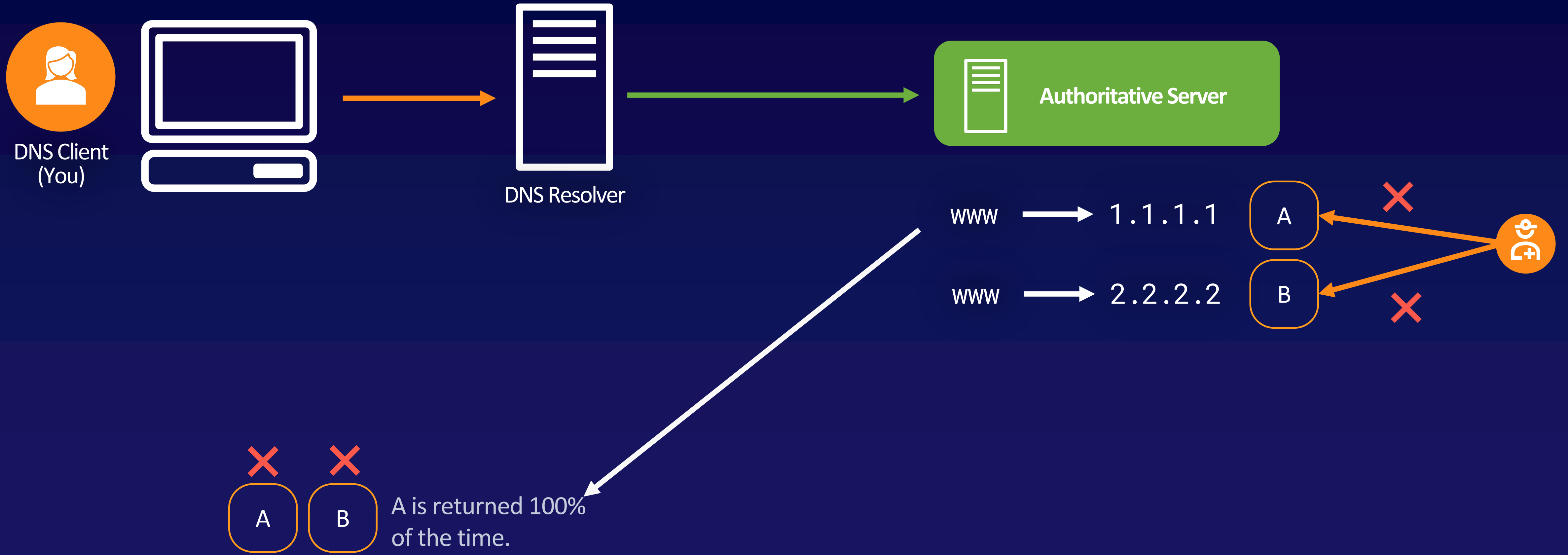
 If primary record set is healthy, it will always be returned.


Failover Routing Policy



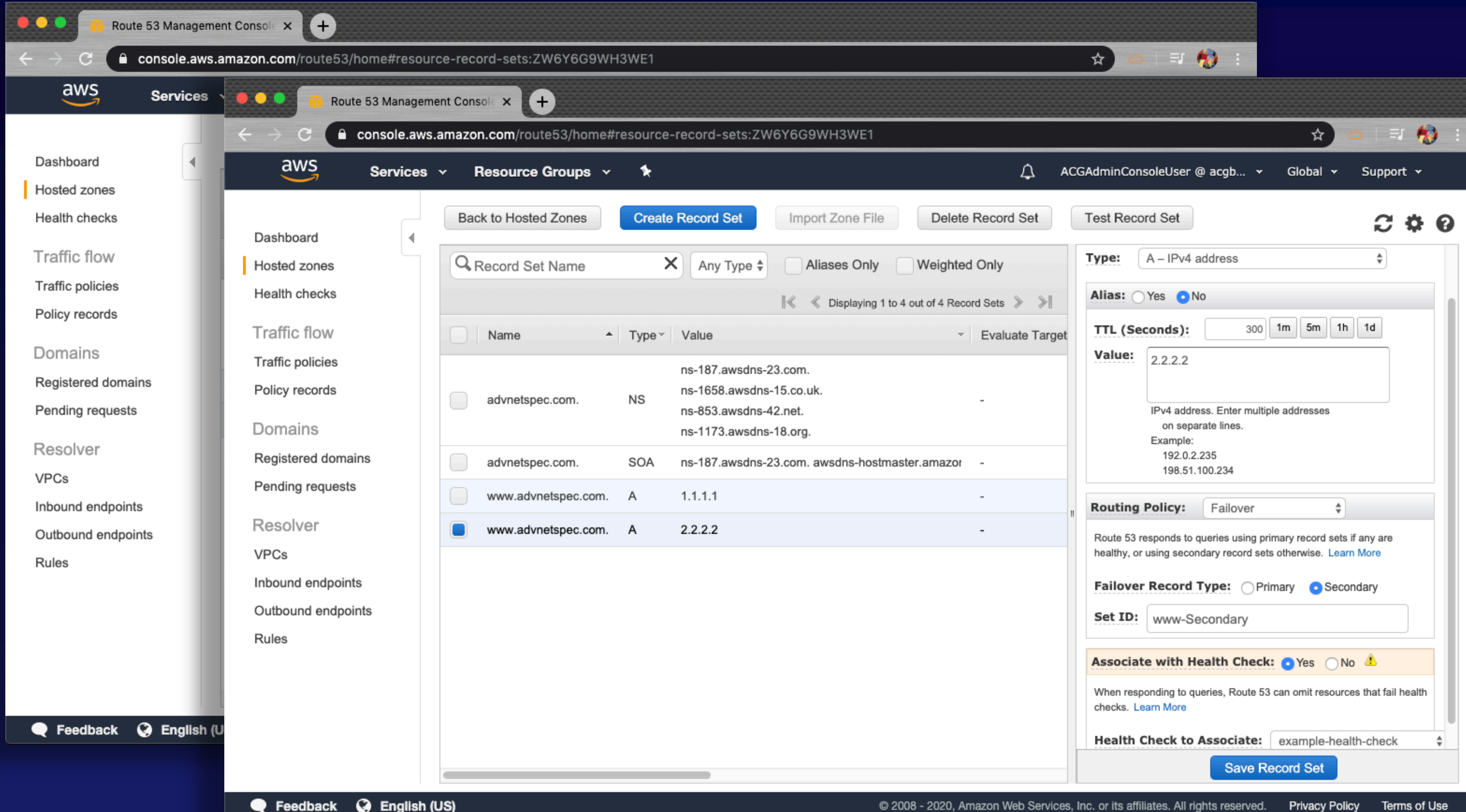
If primary record set is unhealthy then the secondary record set is returned.

Failover Routing Policy



 If both primary and secondary are unhealthy then the primary is returned, even though it is unhealthy.

Failover Routing Policy



The screenshot shows the AWS Route 53 console interface. The left sidebar contains navigation options: Dashboard, Hosted zones, Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, Pending requests, Resolver, VPCs, Inbound endpoints, Outbound endpoints, and Rules. The main content area is titled 'Record Set Name' and shows a list of record sets for the domain 'advnetspec.com.'. The selected record set is 'www.advnetspec.com.' with Type 'A' and Value '2.2.2.2'. The right-hand configuration panel is set to 'Type: A - IPv4 address', 'Alias: No', 'TTL (Seconds): 300', and 'Routing Policy: Failover'. Under 'Failover Record Type', 'Secondary' is selected. The 'Set ID' is 'www-Secondary'. The 'Associate with Health Check' option is set to 'Yes'. The 'Health Check to Associate' is 'example-health-check'. A 'Save Record Set' button is at the bottom of the configuration panel.

Name	Type	Value	Evaluate Target
advnetspec.com.	NS	ns-187.awsdns-23.com. ns-1658.awsdns-15.co.uk. ns-853.awsdns-42.net. ns-1173.awsdns-18.org.	-
advnetspec.com.	SOA	ns-187.awsdns-23.com. awsdns-hostmaster.amazor	-
www.advnetspec.com.	A	1.1.1.1	-
www.advnetspec.com.	A	2.2.2.2	-

Latency Routing Policy



Latency Routing Policy



Latency Routing Policy

The screenshot displays the AWS Route 53 console interface. On the left, a navigation sidebar lists various services like Hosted zones, Traffic flow, Domains, and Resolver. The main content area is titled 'Record Sets' and shows a table of existing records:

Name	Type	Value	Evaluate Target
advnetspec.com.	NS	ns-187.awsdns-23.com. ns-1658.awsdns-15.co.uk. ns-853.awsdns-42.net. ns-1173.awsdns-18.org.	-
advnetspec.com.	SOA	ns-187.awsdns-23.com. awsdns-hostmaster.amazon	-
www.advnetspec.com.	A	2.2.2.2	-
www.advnetspec.com.	A	1.1.1.1	-

On the right side, a configuration panel for a new record set is visible. It includes the following settings:

- Type:** A - IPv4 address
- Alias:** No
- TTL (Seconds):** 300
- Value:** 3.3.3.3
- Routing Policy:** Latency
- Region:** us-east-1
- Set ID:** North America us-east-1
- Associate with Health Check:** No

At the bottom of the console, there is a footer with copyright information: © 2008 - 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved. It also includes links for Privacy Policy and Terms of Use.

Geolocation Routing Policy



Geolocation Routing Policy

Default

Continent : North America

Country : United States

State : California

State : Louisiana

Country : Canada

Continent : Europe

Country : United Kingdom

Country : Holland

The most specific location is always preferred.

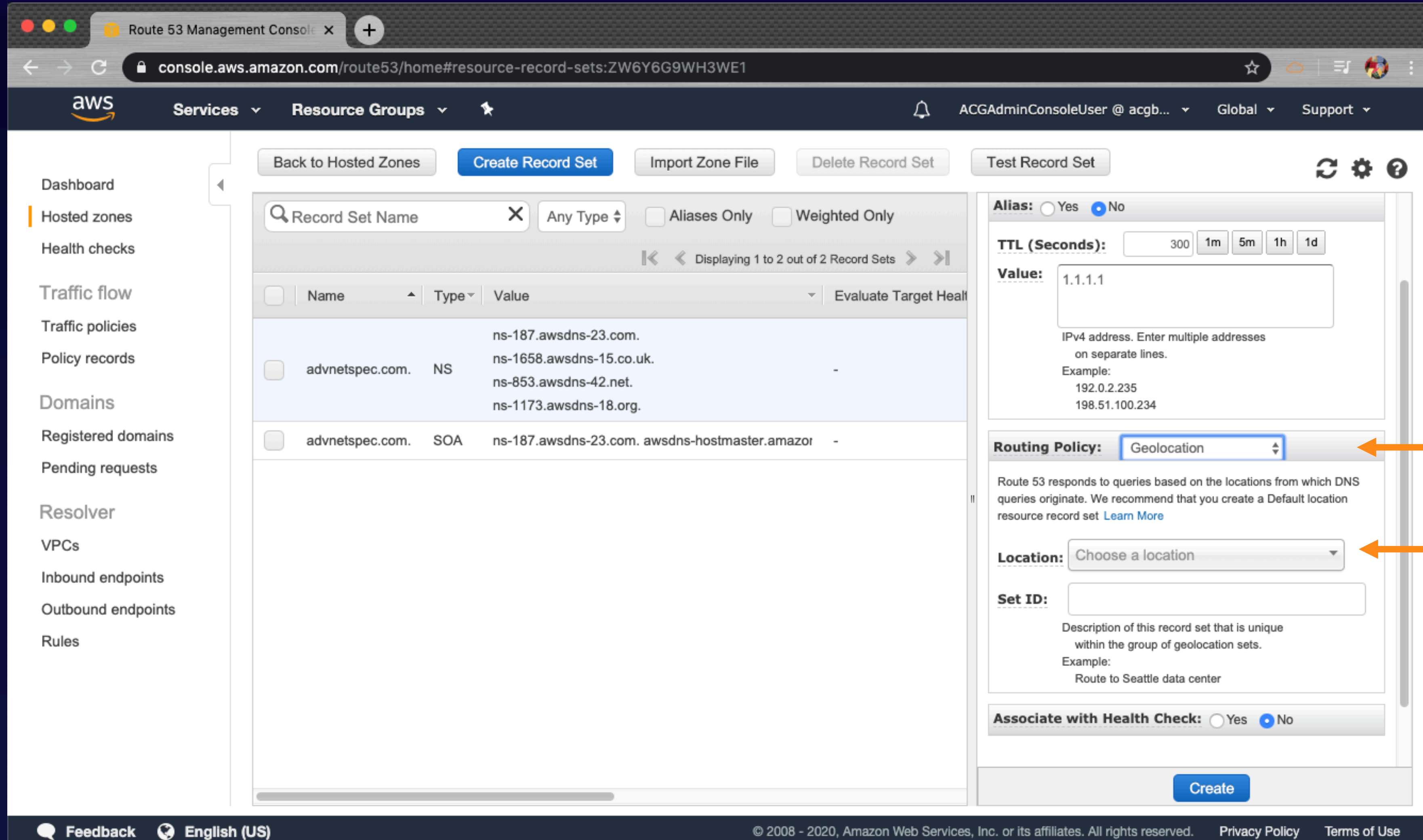
To lock users to a specific region, consider not setting a default location.

The IP address is from the DNS resolver.

Geolocation Routing Is Not Always Accurate

Some IP addresses have no geolocation data associated with them, and the ISP might decide to move IP block ranges from one location to another without warning. To solve this, you can create a record set that handles these unknown IP addresses. To improve the accuracy of geolocation routing, use the **edns-client-subnet** extension.

Geolocation Routing Policy



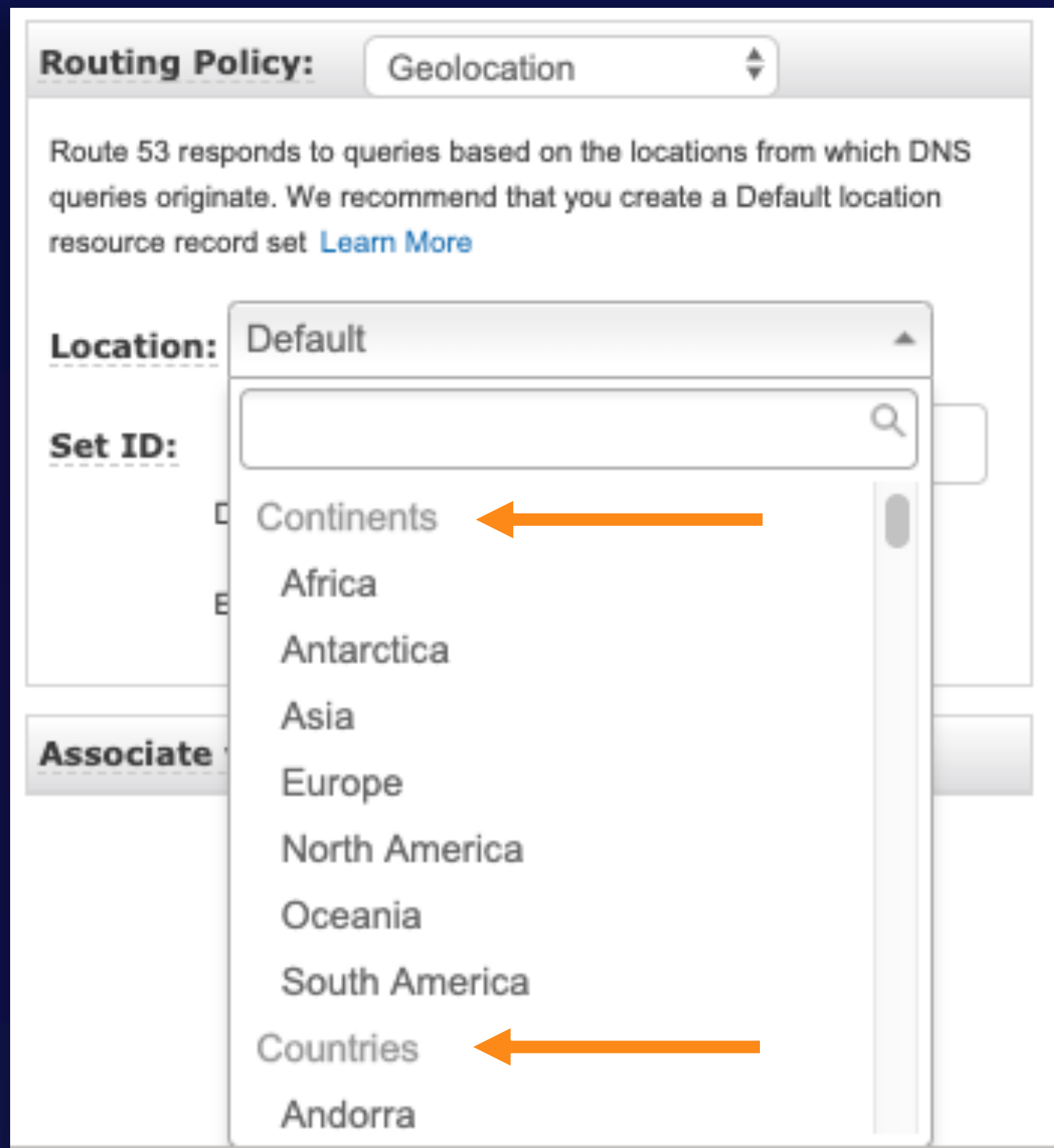
The screenshot shows the AWS Route 53 console interface. The left sidebar contains navigation options: Dashboard, Hosted zones, Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, Pending requests, Resolver, VPCs, Inbound endpoints, Outbound endpoints, and Rules. The main content area is titled 'Create Record Set' and includes buttons for 'Back to Hosted Zones', 'Create Record Set', 'Import Zone File', 'Delete Record Set', and 'Test Record Set'. Below these buttons is a search bar for 'Record Set Name' and filters for 'Any Type', 'Aliases Only', and 'Weighted Only'. A table displays two record sets for the domain 'advnetspec.com':

Name	Type	Value	Evaluate Target Health
advnetspec.com.	NS	ns-187.awsdns-23.com. ns-1658.awsdns-15.co.uk. ns-853.awsdns-42.net. ns-1173.awsdns-18.org.	-
advnetspec.com.	SOA	ns-187.awsdns-23.com. awsdns-hostmaster.amazor	-

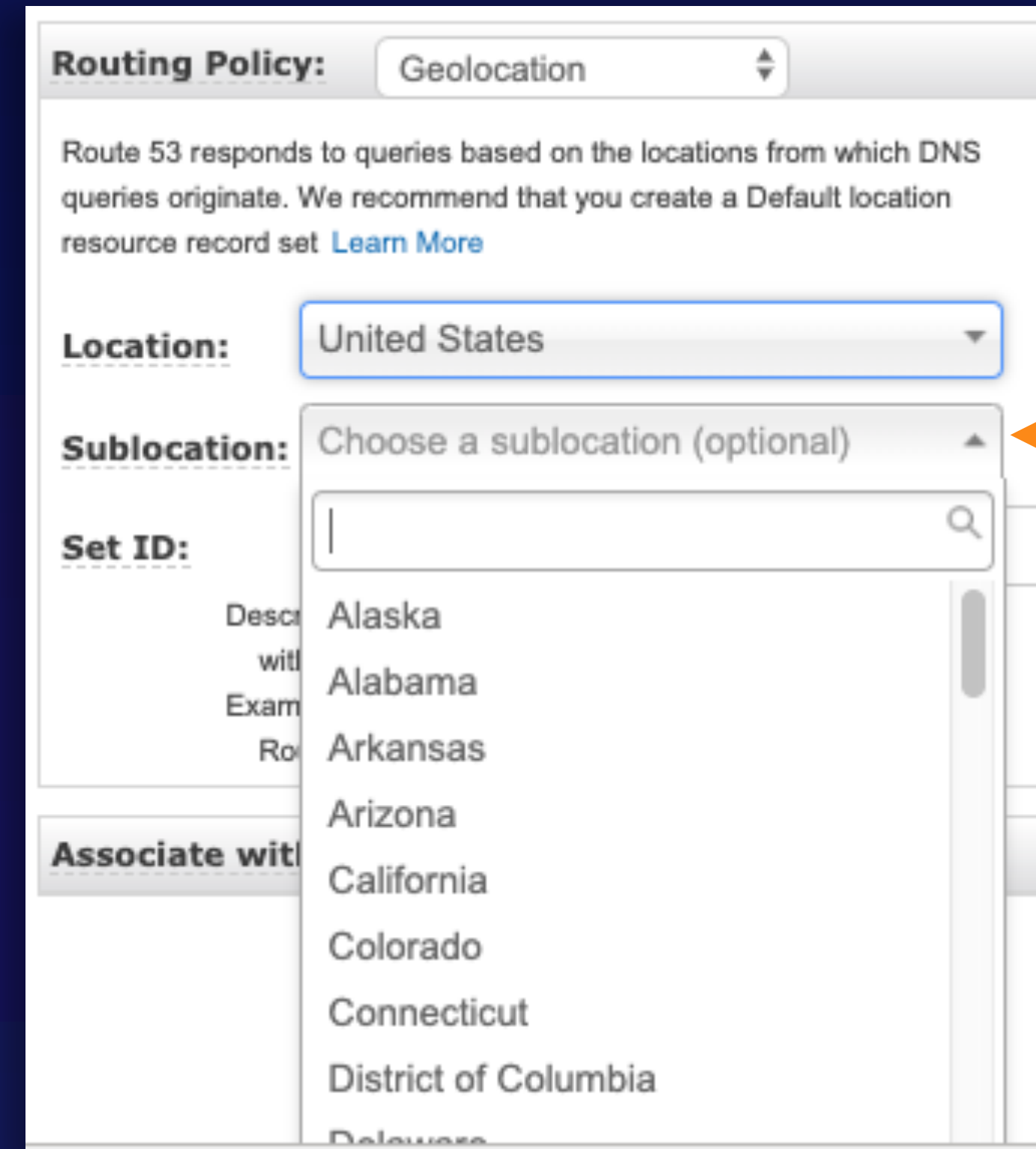
On the right side, the 'Create Record Set' form is visible. The 'Alias' option is set to 'No'. The 'TTL (Seconds)' is set to 300. The 'Value' field contains '1.1.1.1'. The 'Routing Policy' dropdown is set to 'Geolocation', highlighted by an orange arrow. Below this, a description states: 'Route 53 responds to queries based on the locations from which DNS queries originate. We recommend that you create a Default location resource record set [Learn More](#)'. The 'Location' dropdown is set to 'Choose a location', also highlighted by an orange arrow. The 'Set ID' field is empty. The 'Associate with Health Check' option is set to 'No'. A 'Create' button is at the bottom of the form.

Geolocation Routing Policy

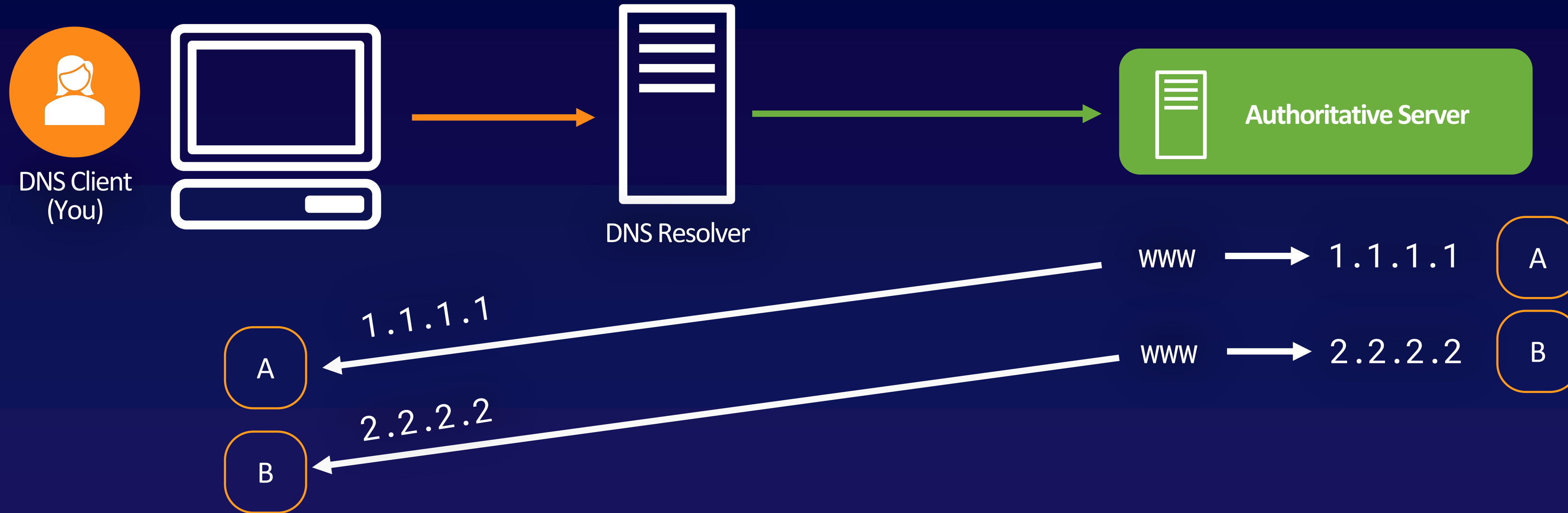
Continent and Countries



States



Multi-value Response Routing Policy



Each request will return up to 8 possible responses.



Health checks can be used to only return healthy hosts.