Cloud Services I Networking I

PXL DIGITAL

AWS Cloud Practitioner Essentials (Second Edition): AWS Networking Services

VPC concepts and fundamentals

aws SUMMIT

What is a VPC ?

VPC concepts and fundamentals

IP addressing

Creating subnets

Routing in a VPC

DNS in-VPC with Amazon Route 53

Security

Choosing an IP address range

Choosing an IP address range for your VPC

Avoid ranges that overlap with other networks to which you might connect

Size your VPC appropriately

Ability to summarize VPC CIDRs into a superset is a plus

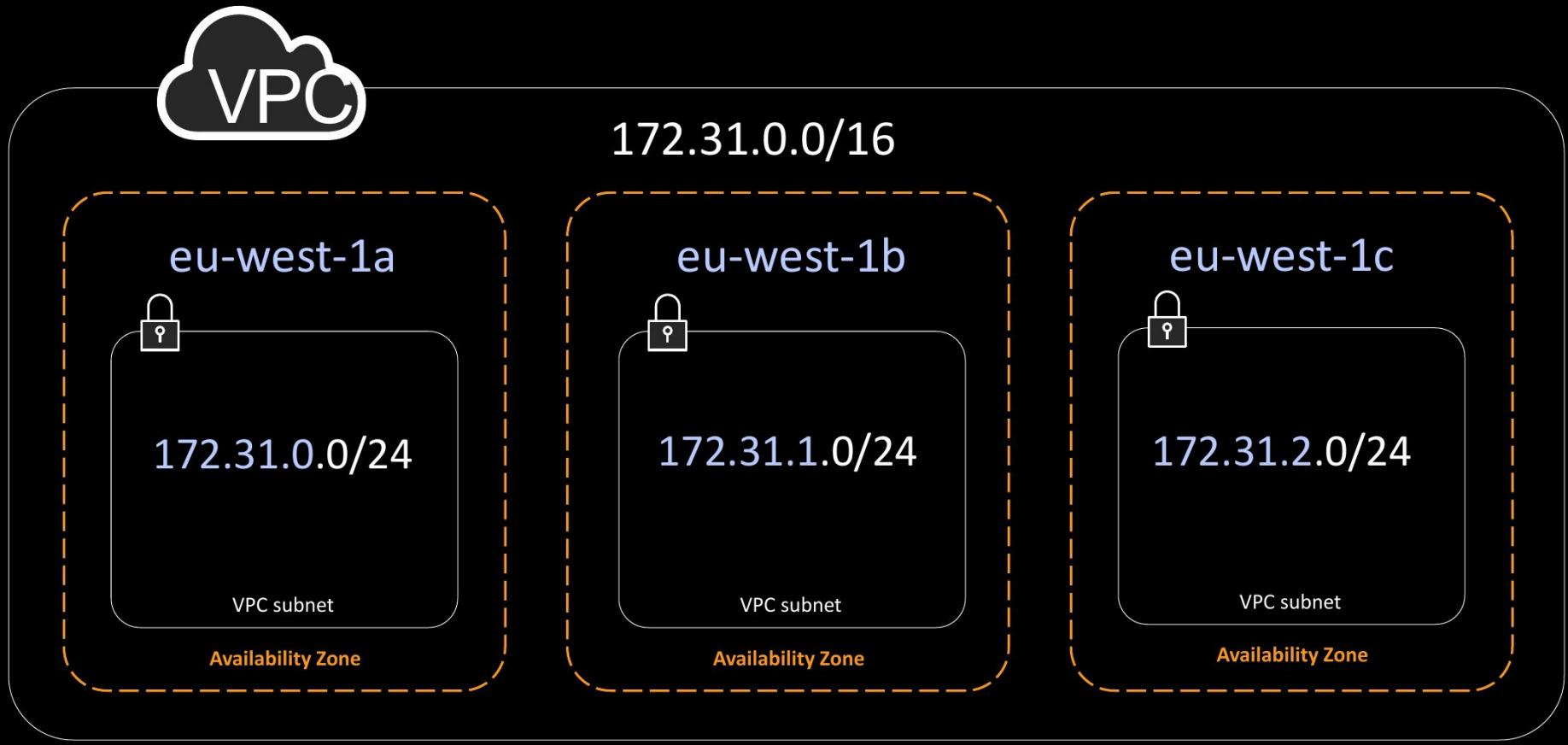
172.31.0.0/16

Recommended: RFC1918 range

Expandable

Creating subnets in a VPC

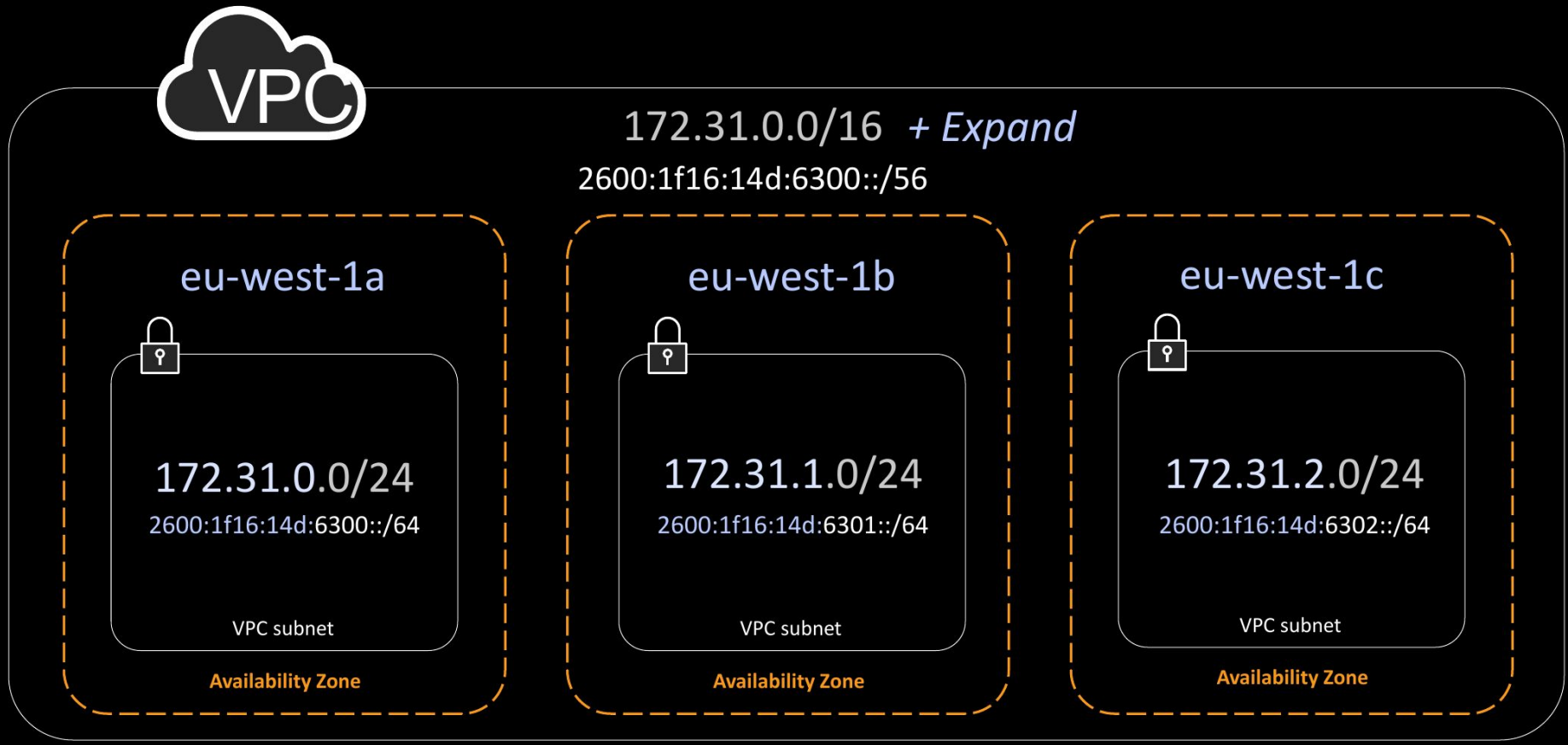
VPC subnets and Availability Zones



IPv6 in your VPC

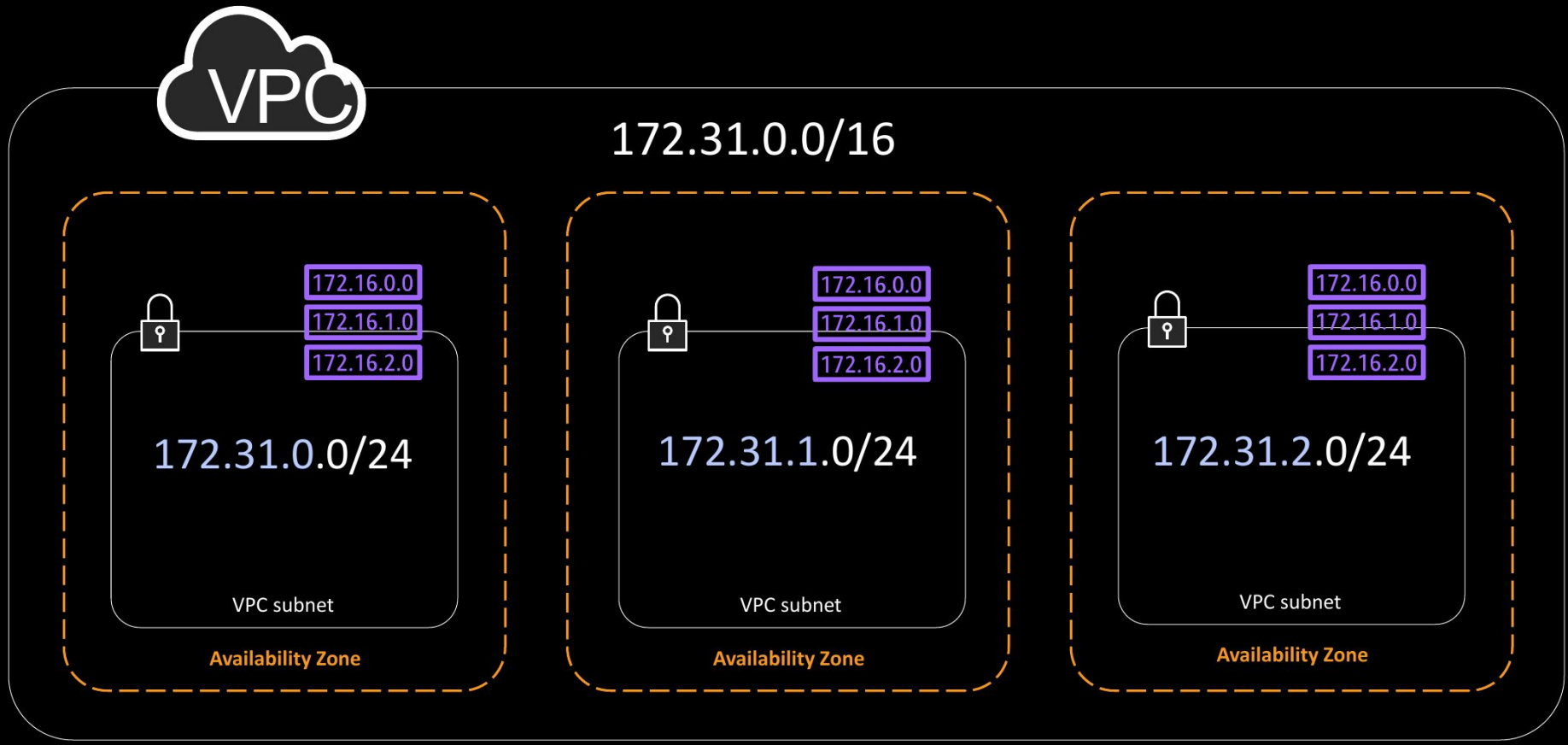
- Can have a dual-stack VPC by adding an IPv6 CIDR
- Fixed sizes for VPC and subnets:
  - /56 VPC (4,722,366,482,869,645,213,696 addresses)
  - /64 subnets (18,446,744,073,709,551,616 addresses)

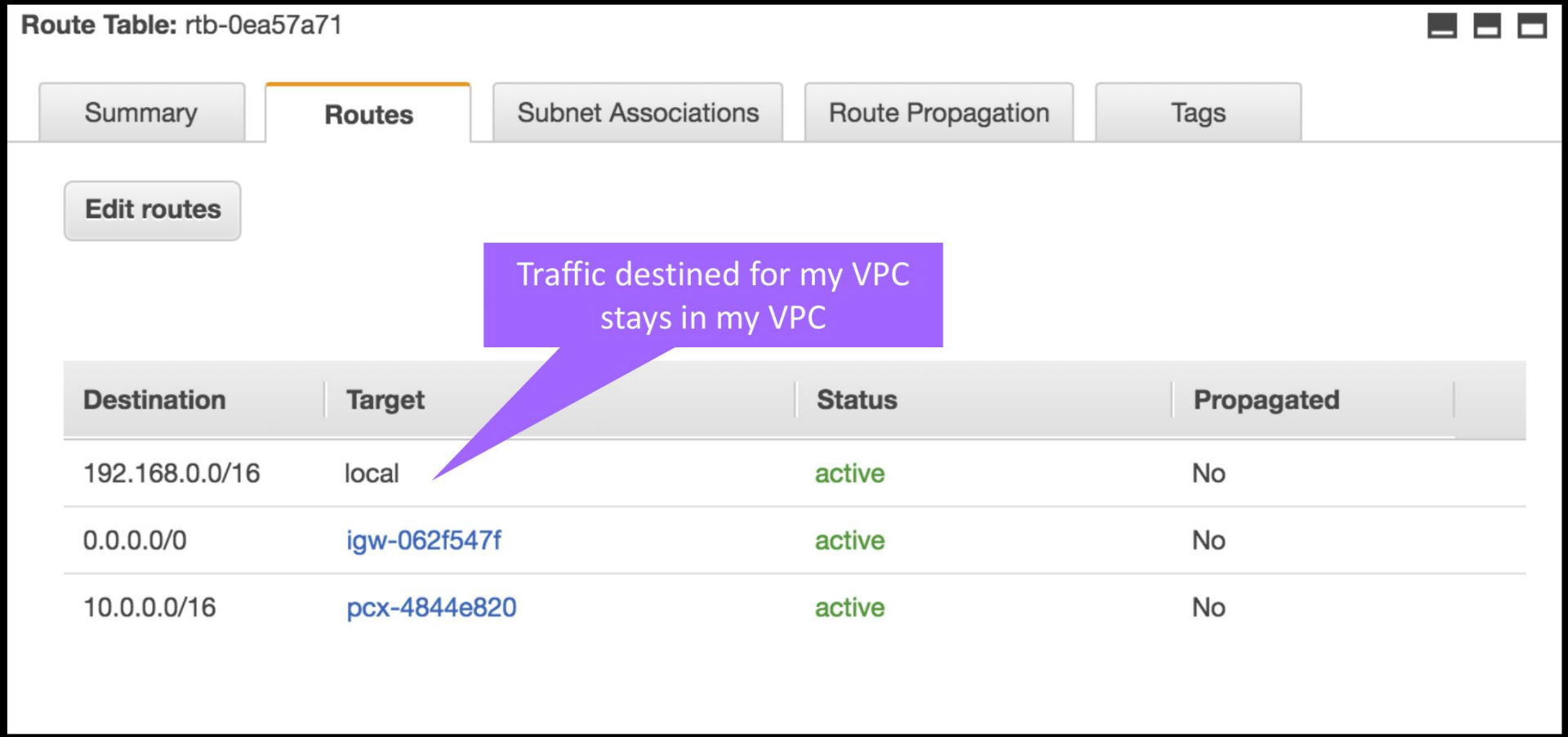
VPC subnets and Availability Zones



Routing in a VPC

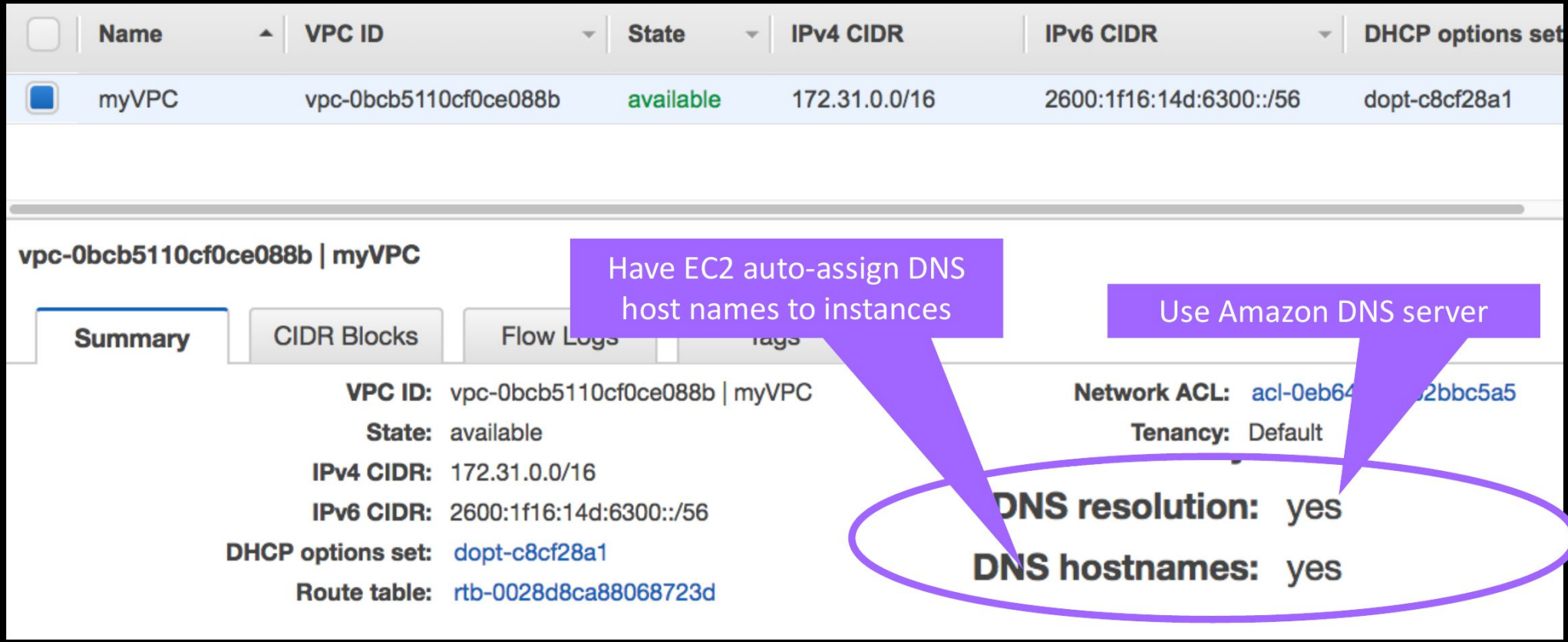
Route tables



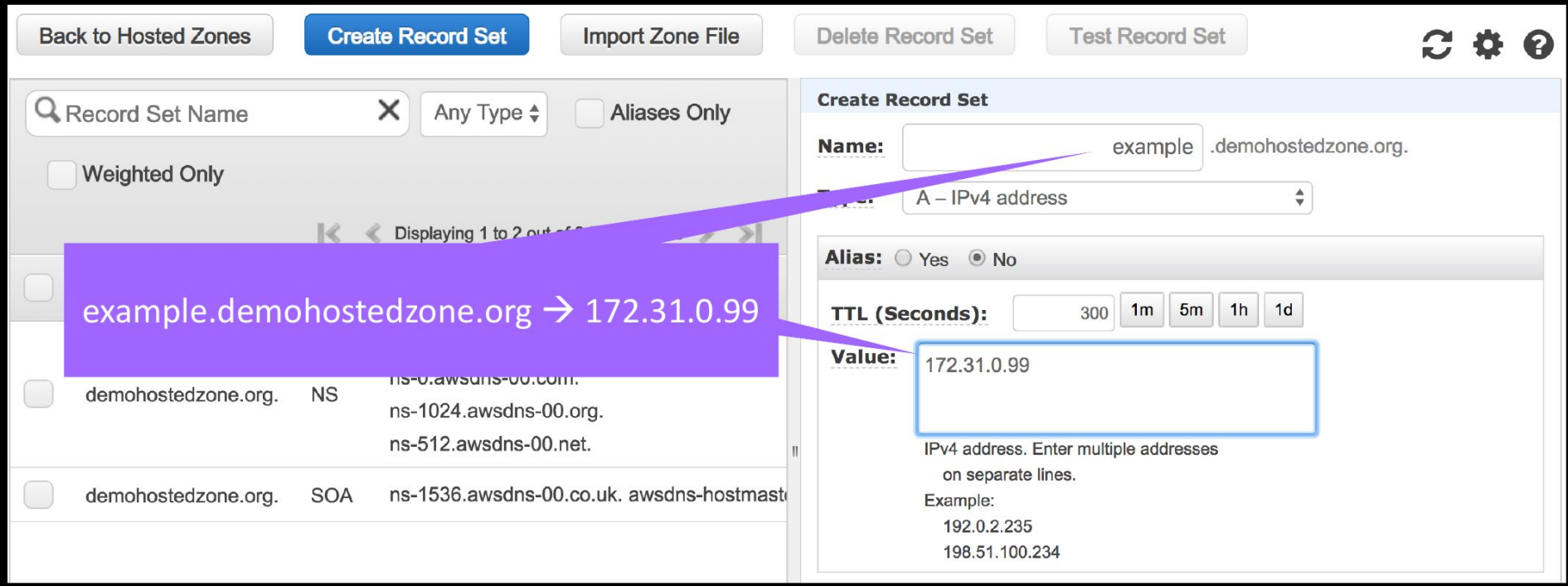


DNS in a VPC

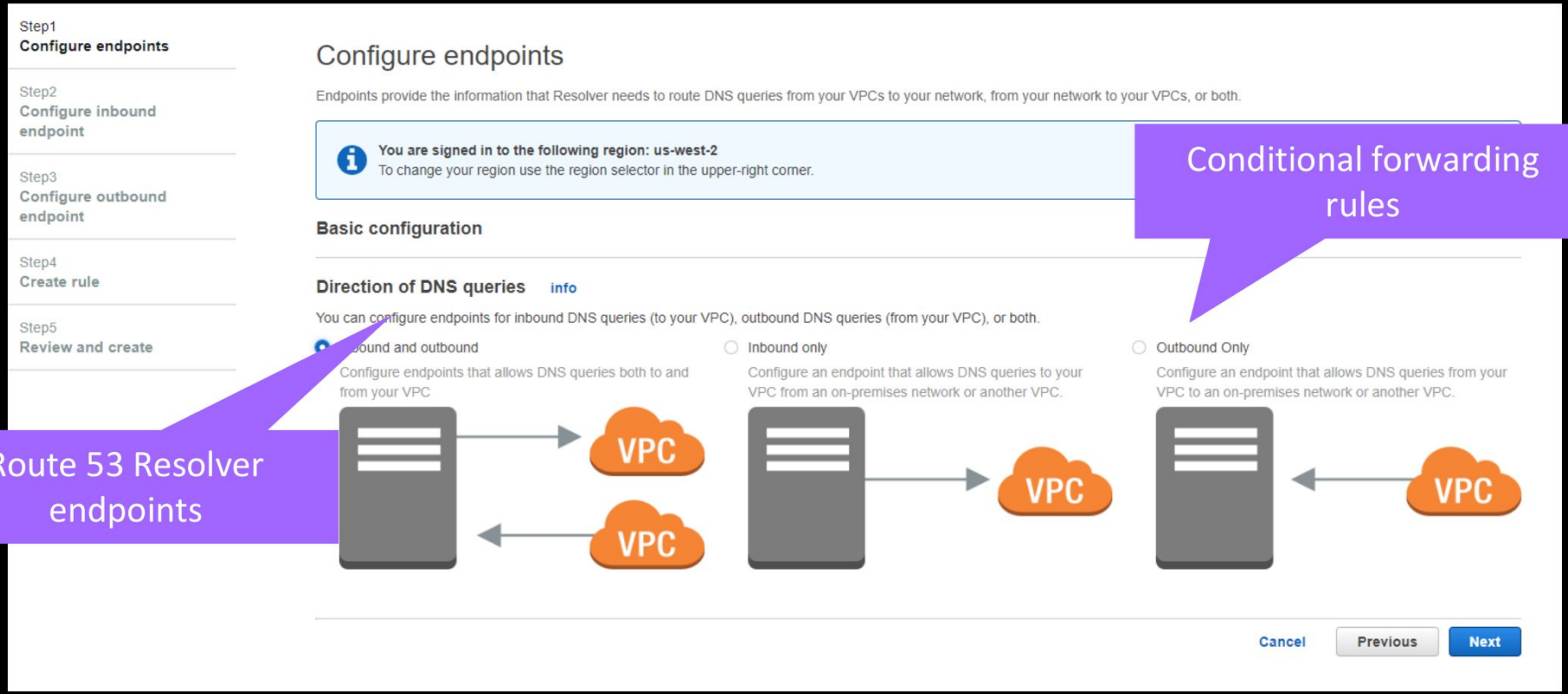
VPC DNS options



Amazon Route 53 private hosted zones



Amazon Route 53 Resolver for hybrid clouds



Networking labs

- Online lab platform
  - AWSGen (networking lab part 1)
  - Create a VPC with public and private networks
  - Provide a bastion host to access VPC resources on AWS
  - Use Route53 Resolvers and traffic flow policies