Optimize end user connectivity for multi-region architectures

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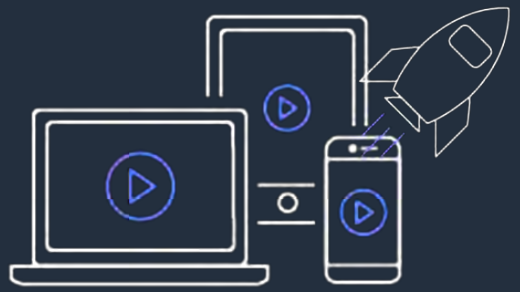
Why?

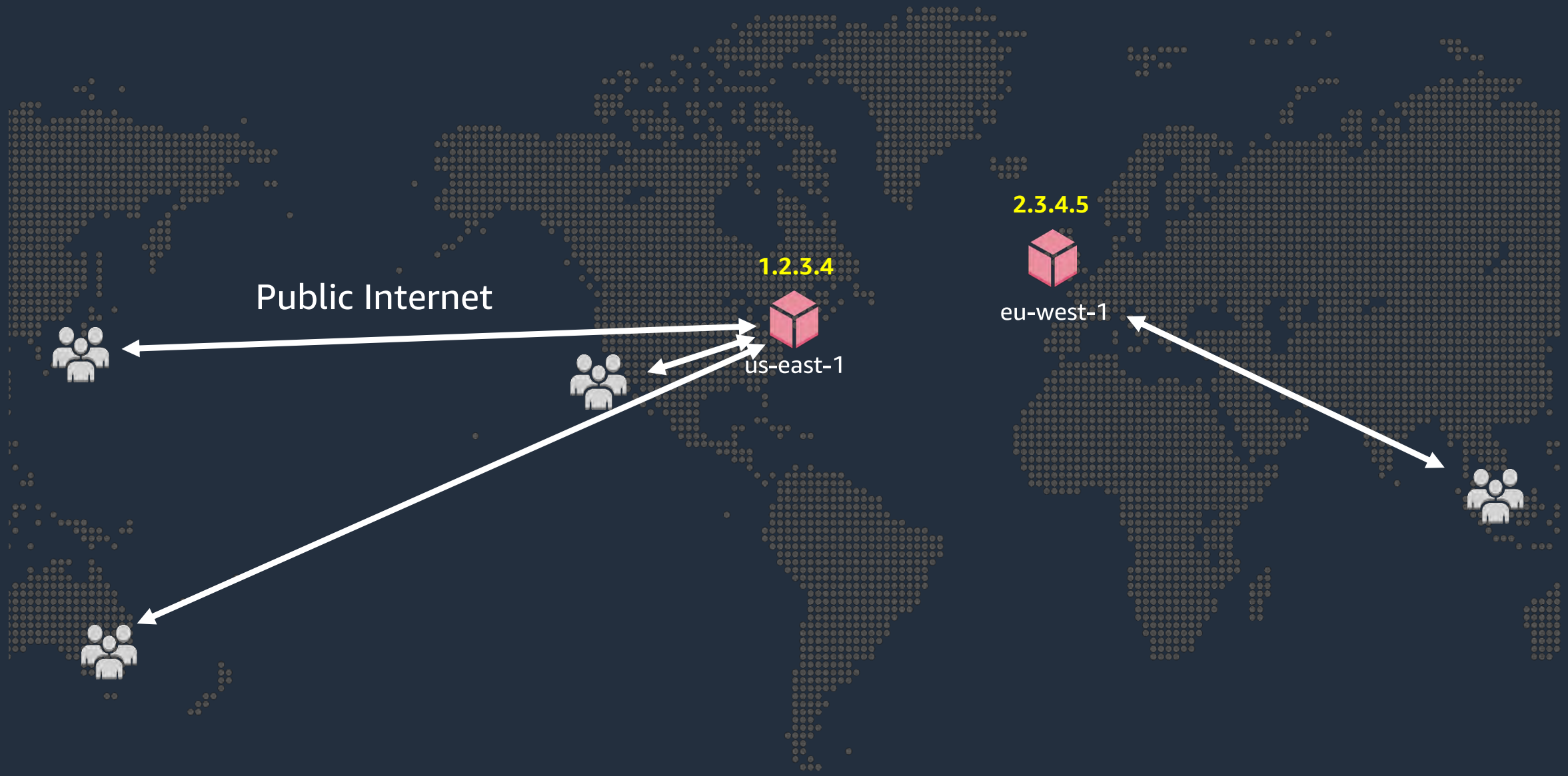


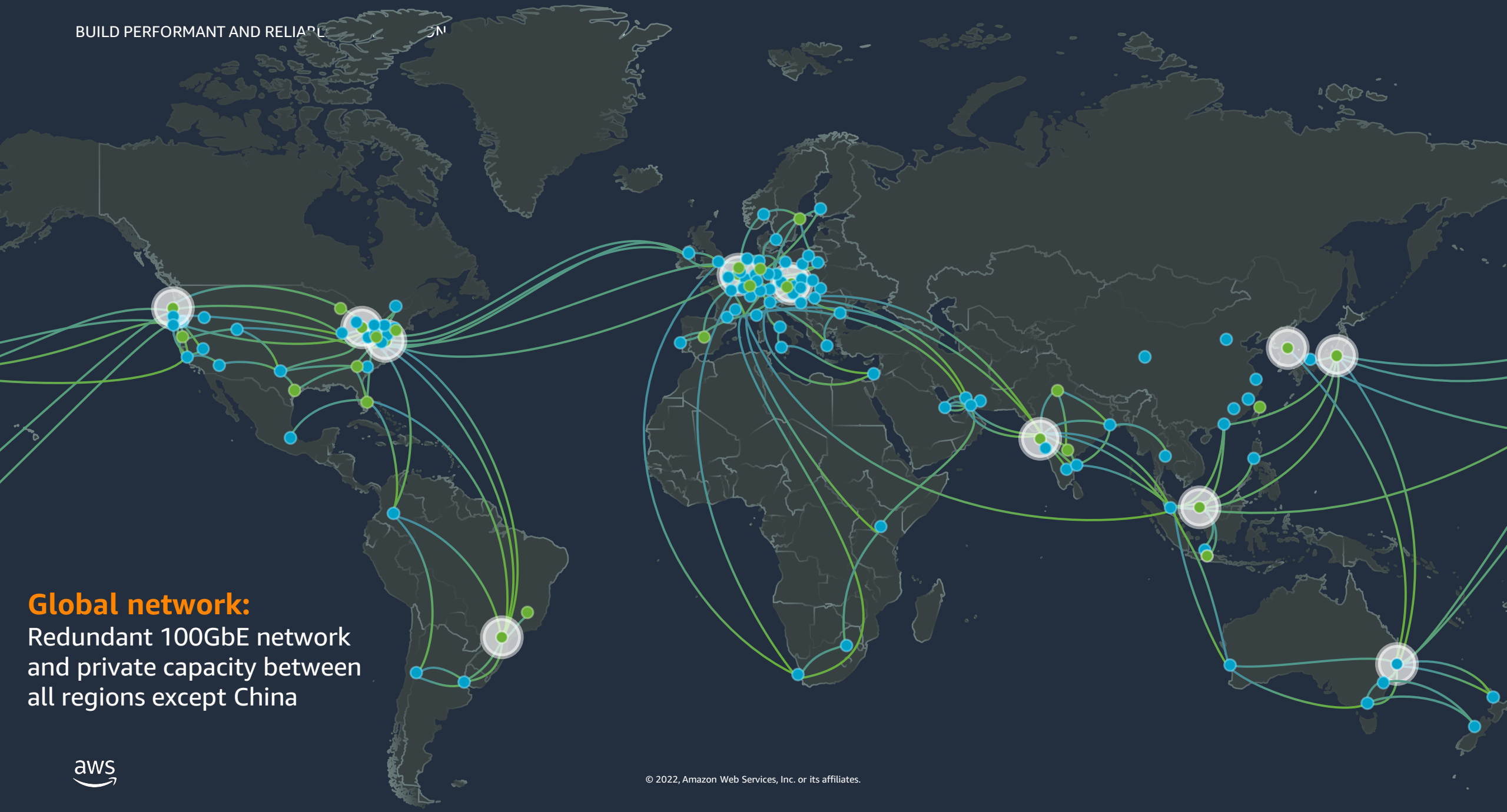
Connect end users to applications as fast as possible

Deploy highly available systems with instantaneous failover

AWS Global Accelerator

BUILD PERFORMANT AND RELIABLE MULTI-REGION ARCHITECTURE ON AWS

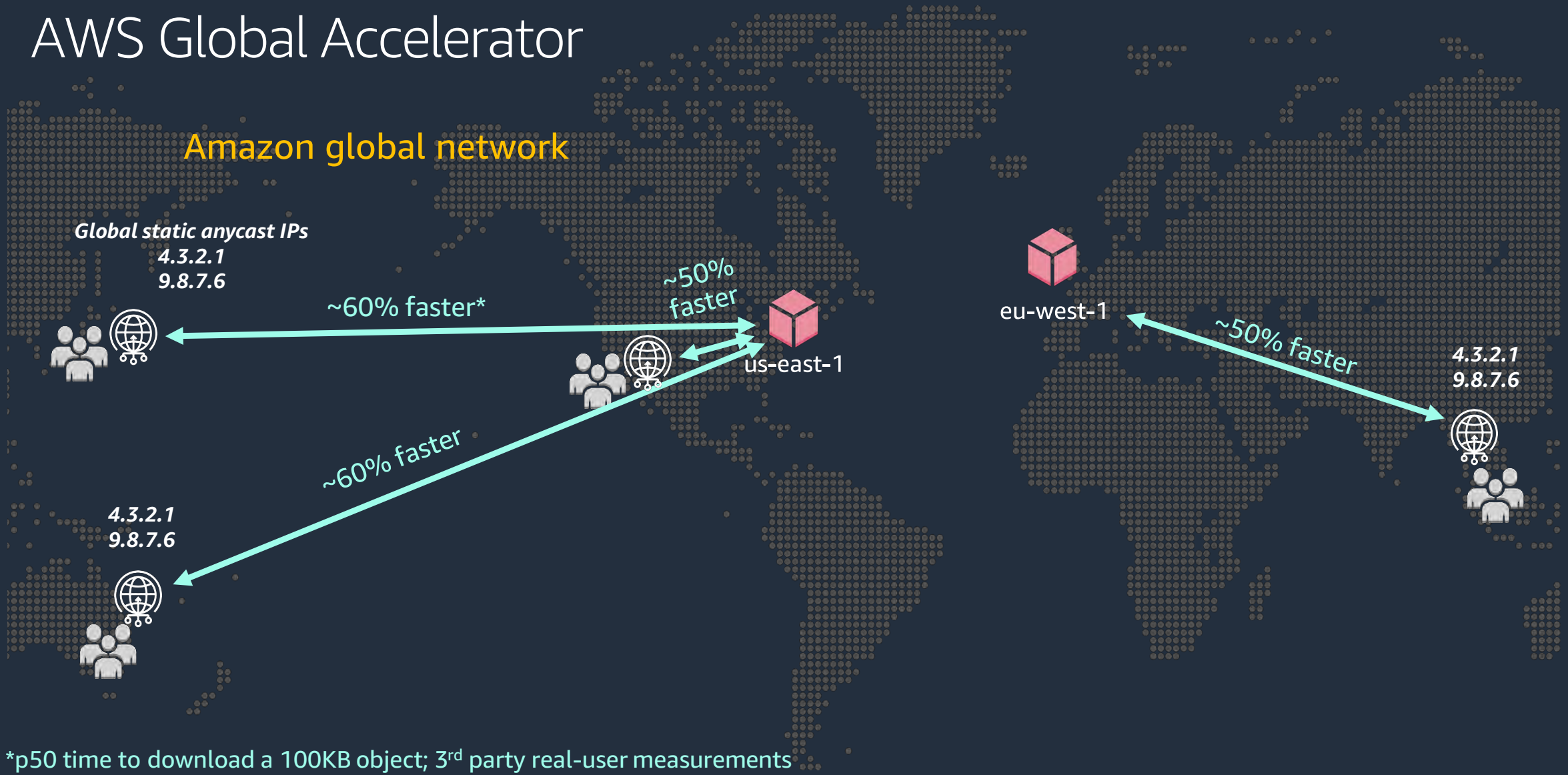




Global network:
Redundant 100GbE network and private capacity between all regions except China

aws

AWS Global Accelerator



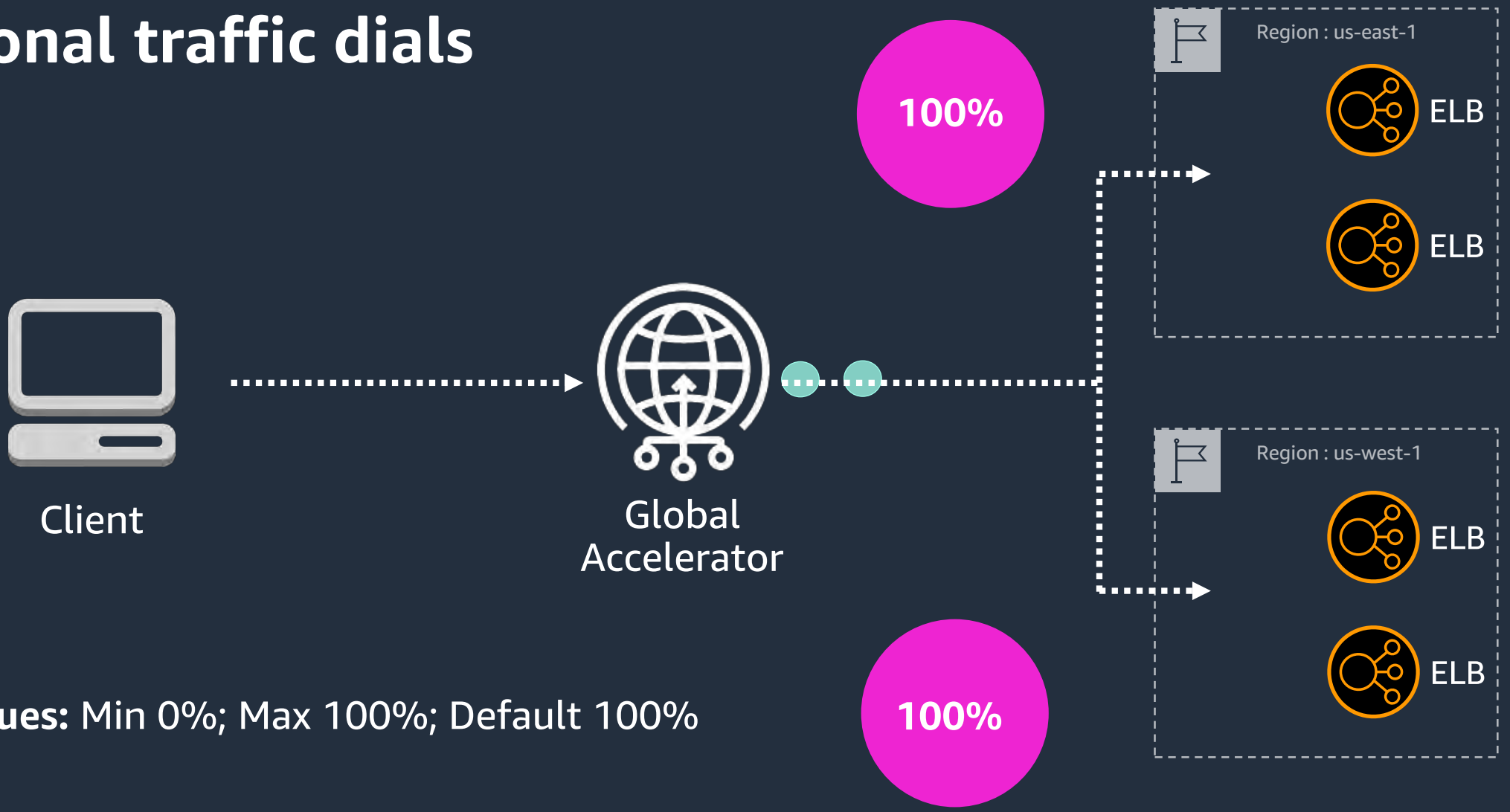
*p50 time to download a 100KB object; 3rd party real-user measurements

aws

Demo

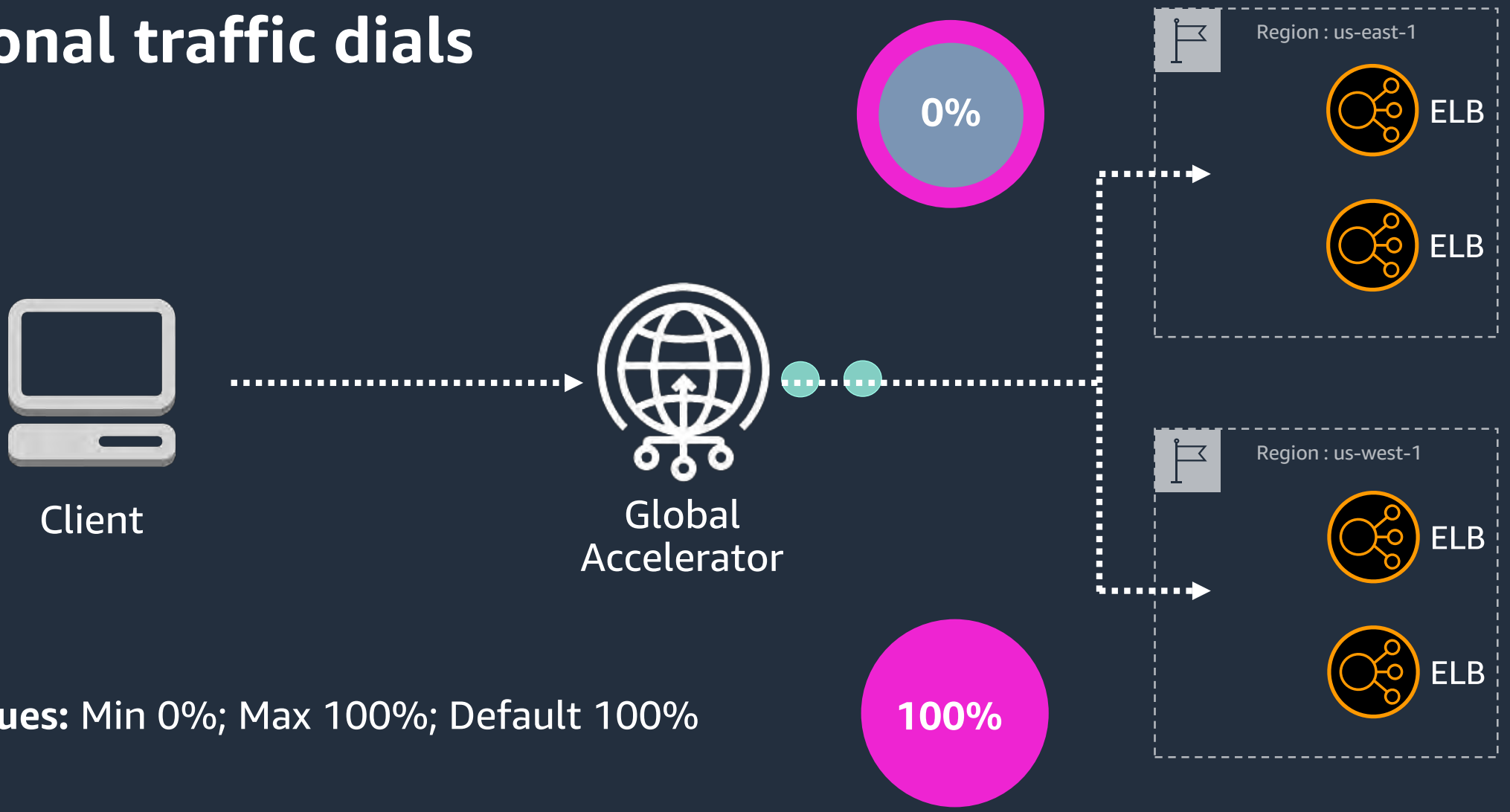
AWS Global Accelerator: Traffic dials

Regional traffic dials



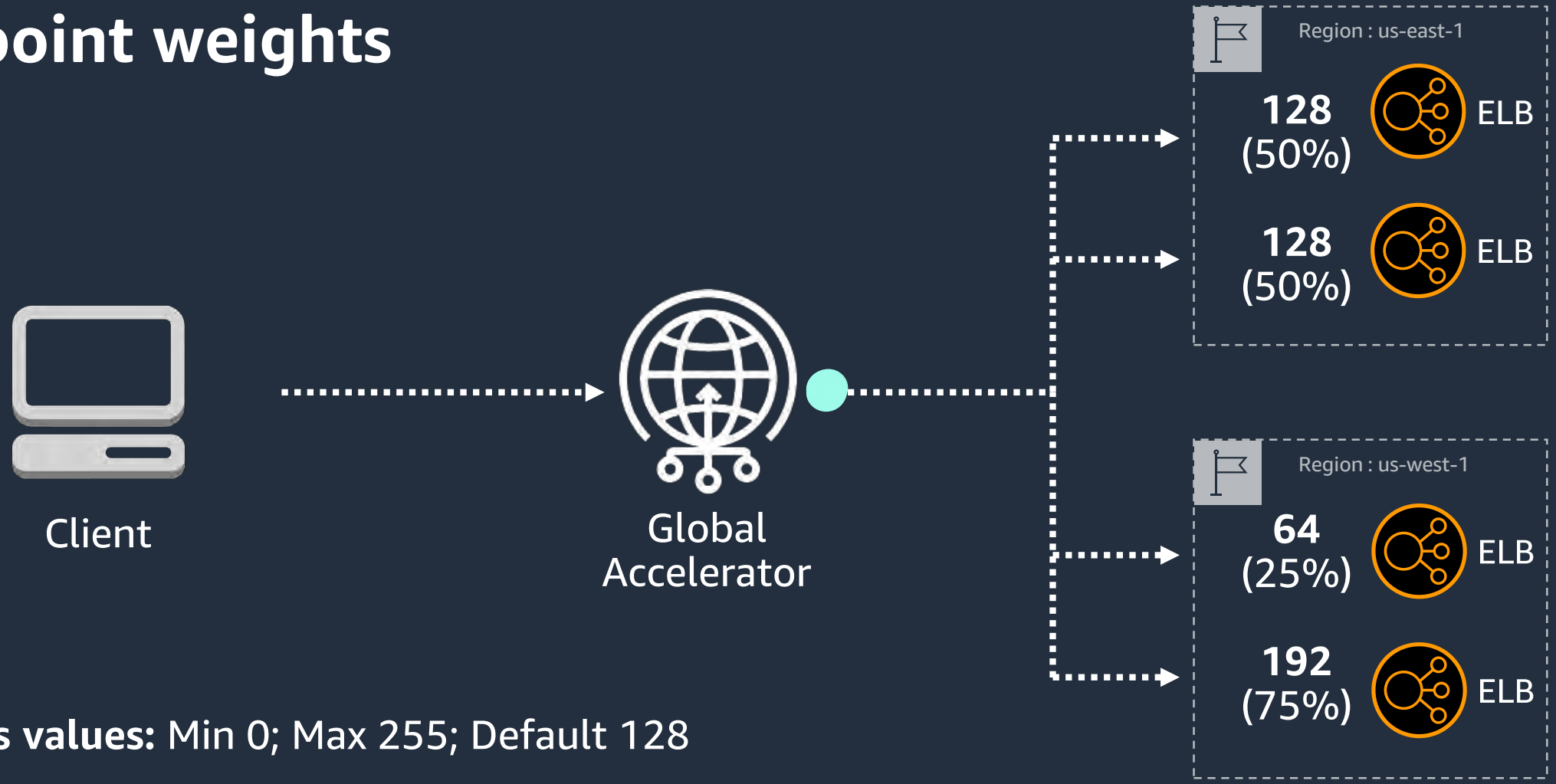
Dial values: Min 0%; Max 100%; Default 100%

Regional traffic dials



Dial values: Min 0%; Max 100%; Default 100%

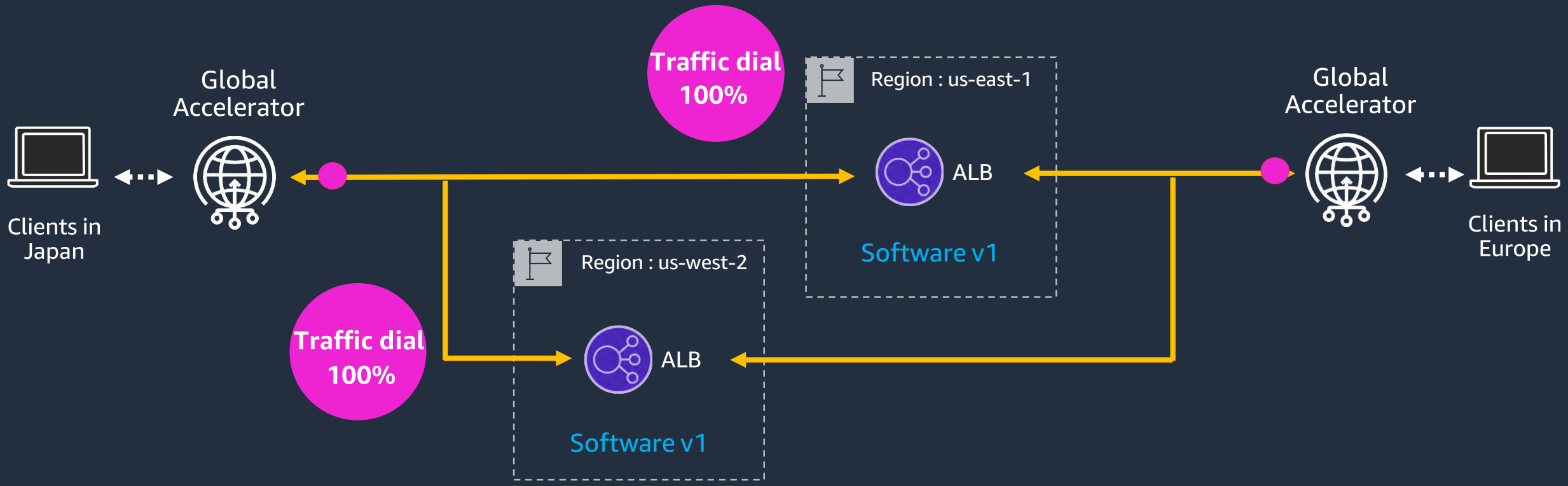
Endpoint weights



Weights values: Min 0; Max 255; Default 128

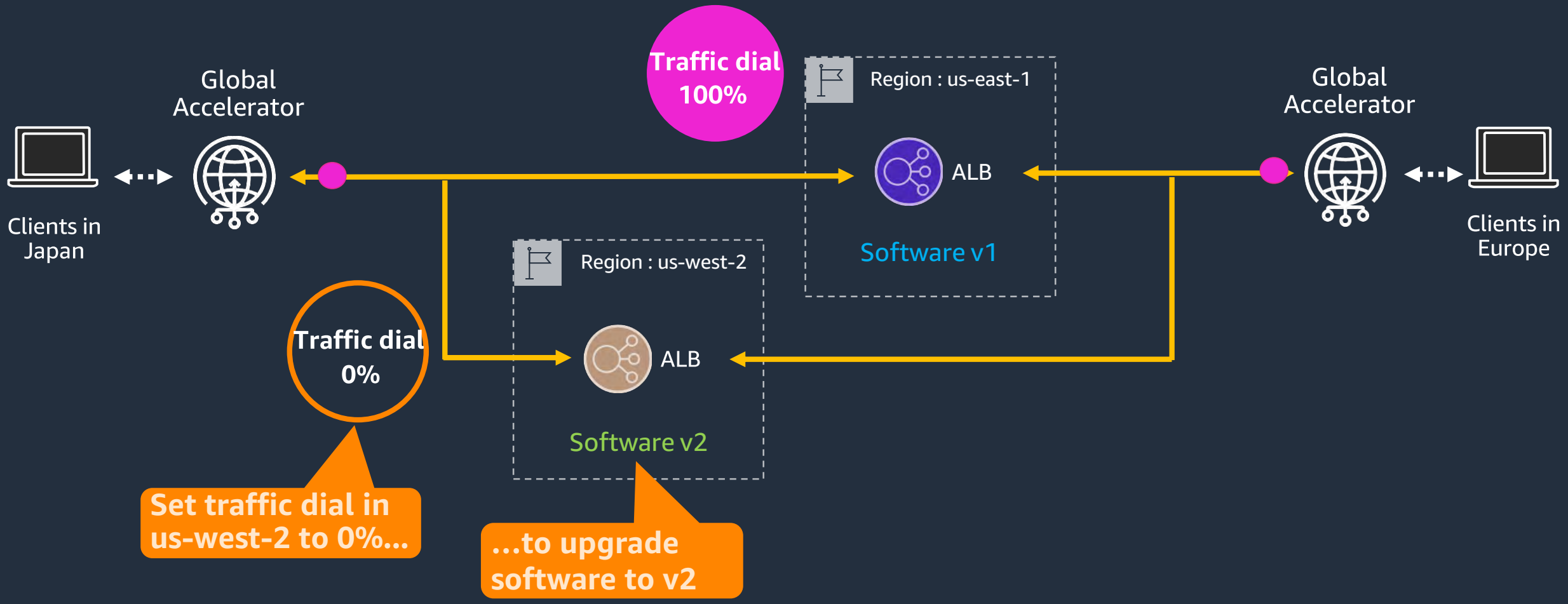
AWS Global Accelerator: Blue/green deployment

Blue/green deployments

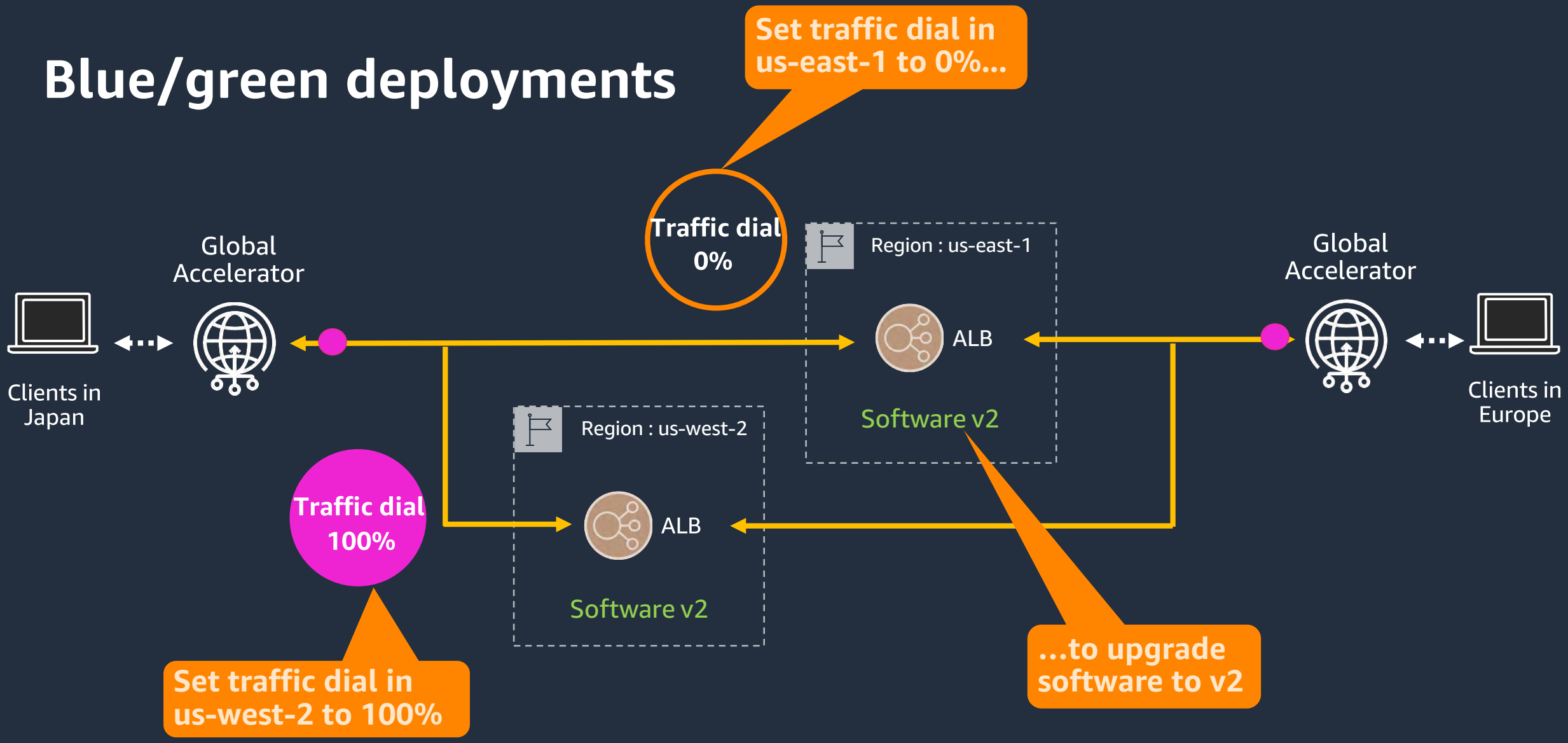


You want to upgrade software in both regions from v1 to v2

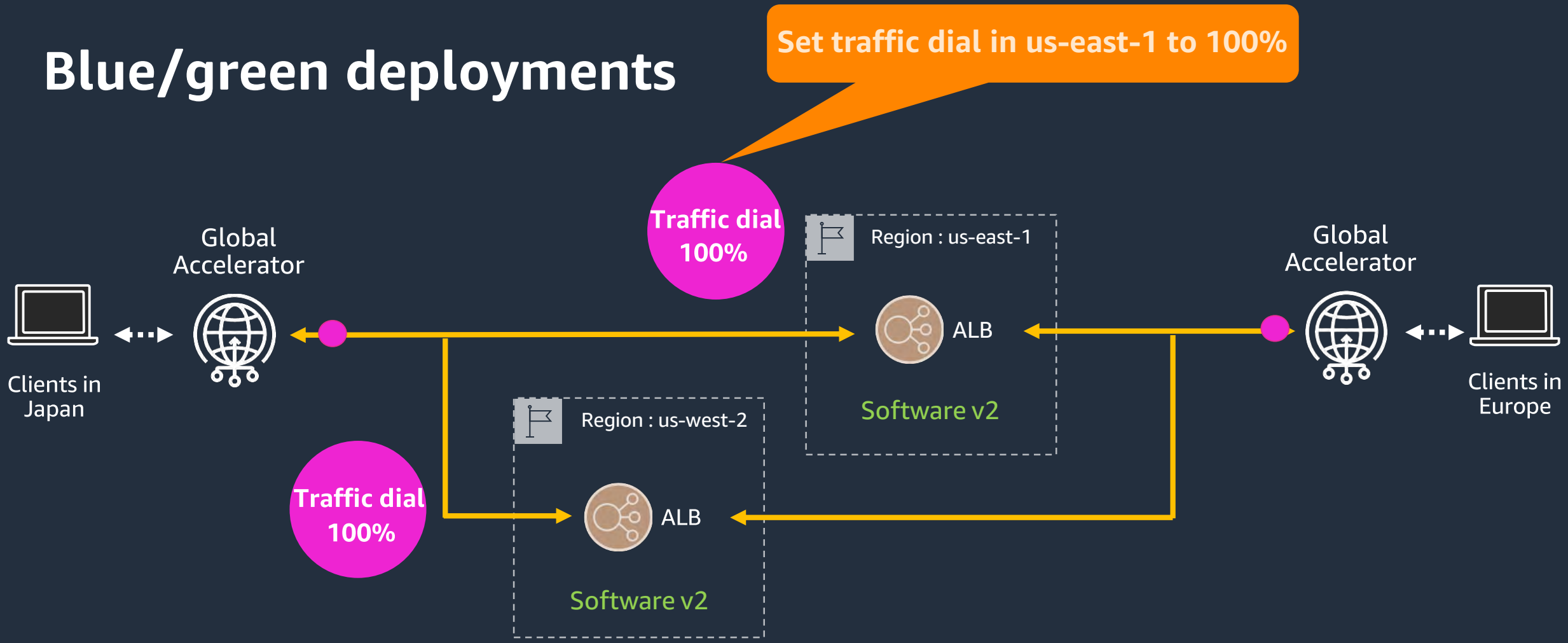
Blue/green deployments



Blue/green deployments



Blue/green deployments



Demo

Multi-region architecture: Disaster recovery

Control plane

Data plane

Amazon Route53 Application Recovery Controller

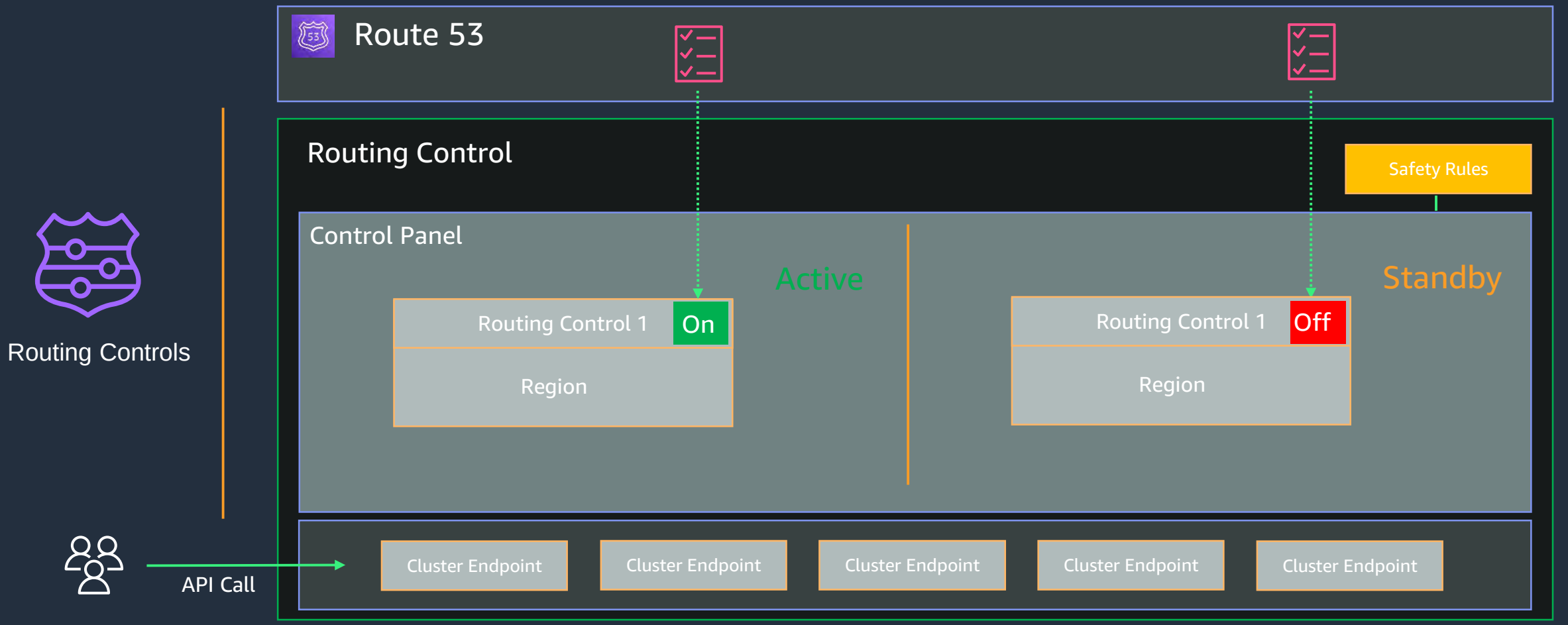
Amazon Route53 Application Recovery Controller (ARC)

Centralized and reliable way to manage cross-cell recovery

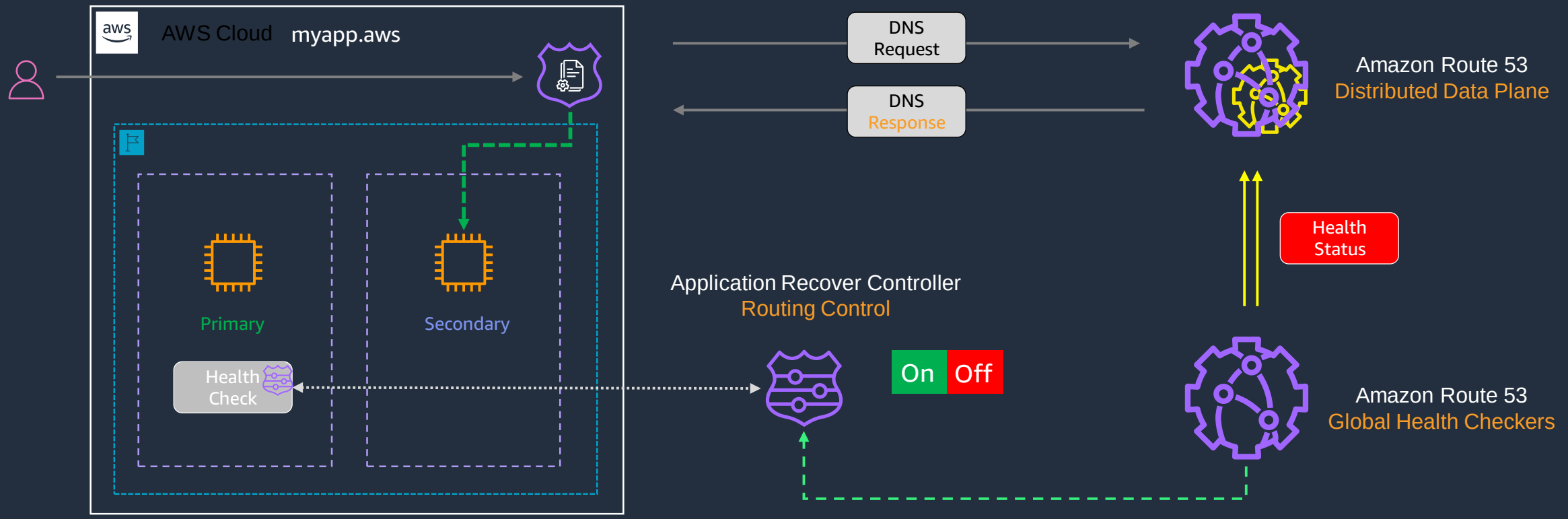
Failover and failback

ARC key capabilities

Amazon Route 53 Application Recovery Controller



Amazon Route 53 and Routing Control Status



Demo

Key takeaways

- Minimize hops to the AWS backbone for better performance
- Eliminate control plane dependencies for DR
- Make a big red button for manual failovers

Thank you!

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