aws re: Invent

NET311-R

Traffic management for multiregion architectures

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Agenda

Why design with multiple regions?

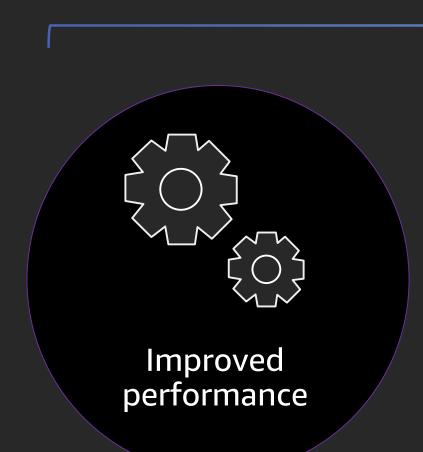
Challenges for managing traffic

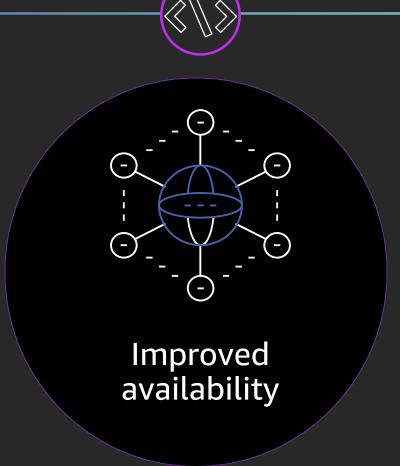
Routing patterns on AWS

Open discussion

Further considerations for multi-region deployment

Why design with multiple regions?







Routing challenges

- 1. Stickiness/session management
- 2. Routing to AWS managed endpoints
- 3. Stateful vs stateless failover

AWS global infrastructure

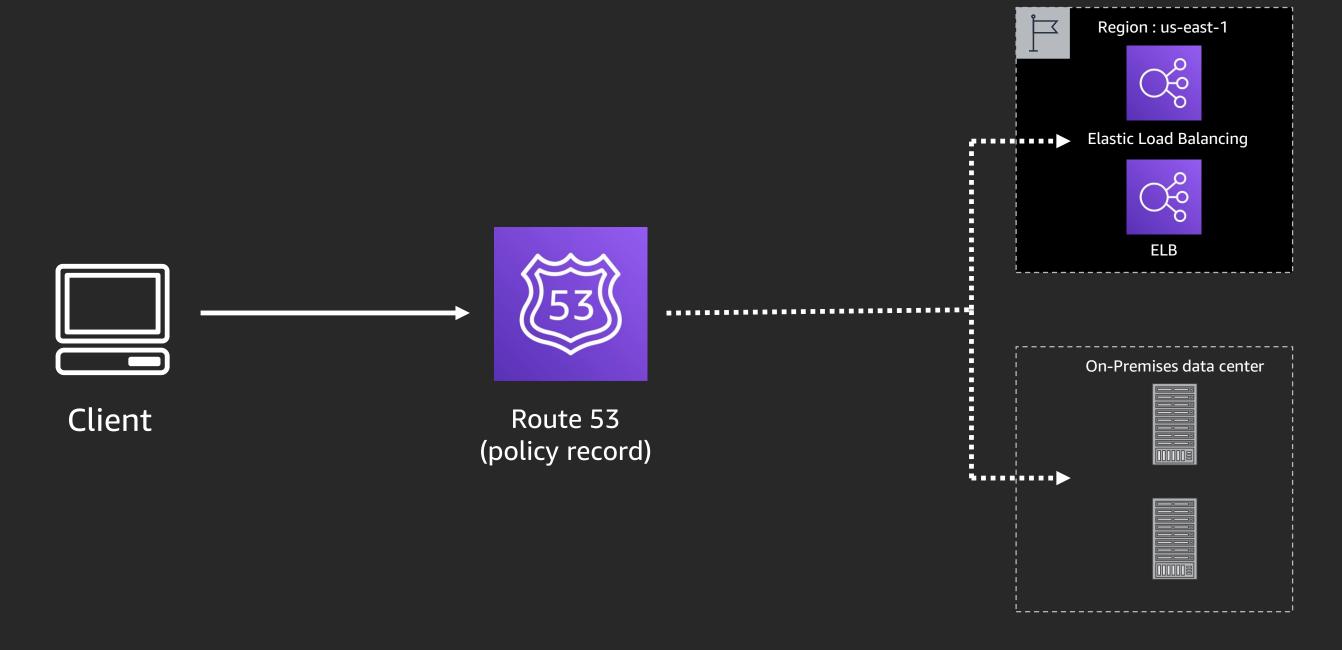


Routing patterns

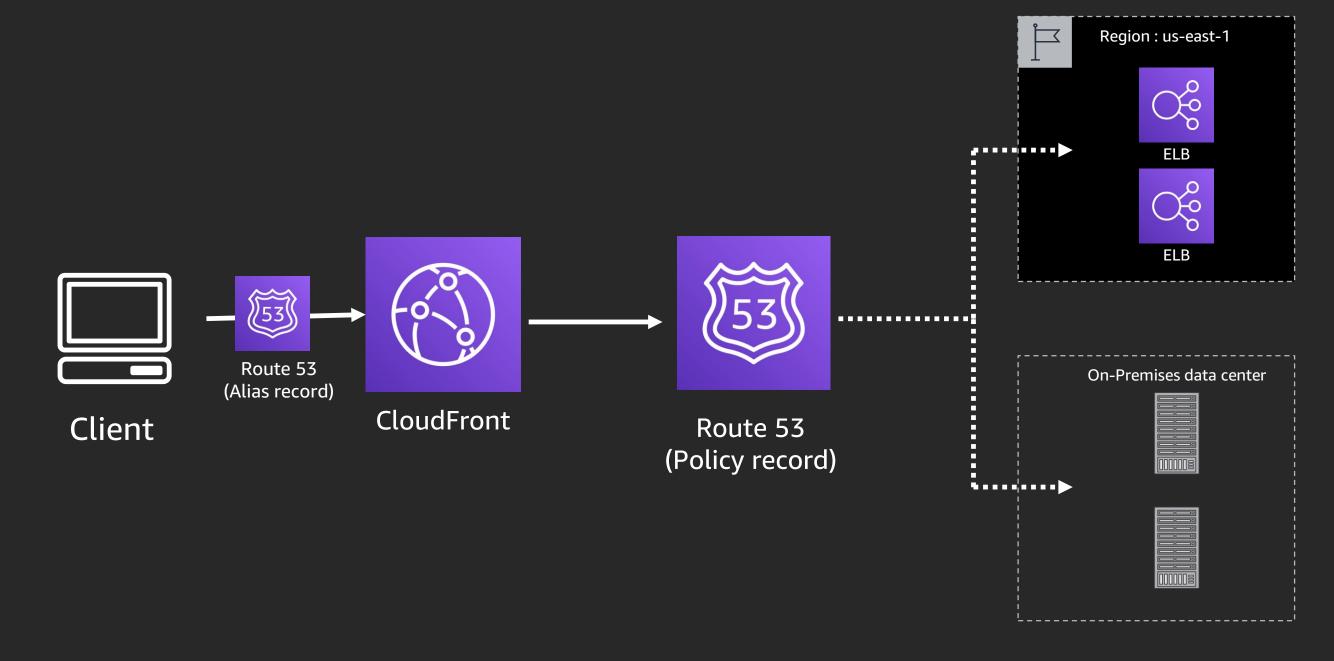




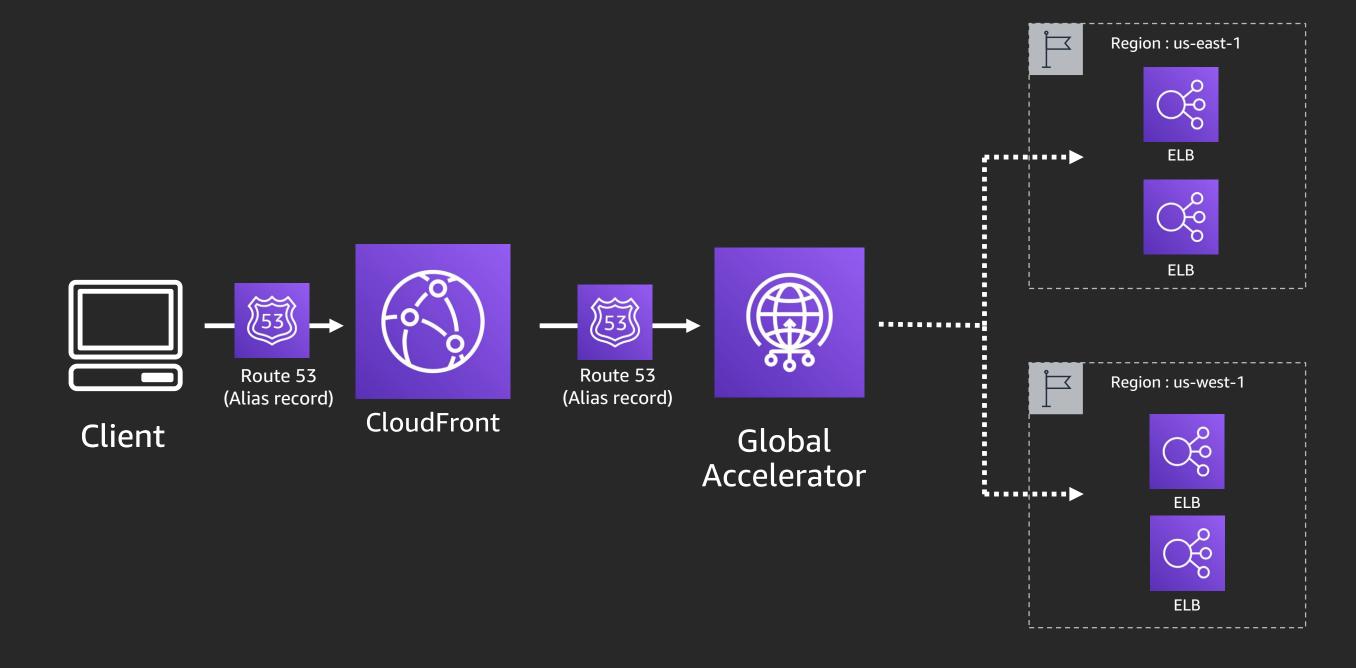
Traditional DNS based routing



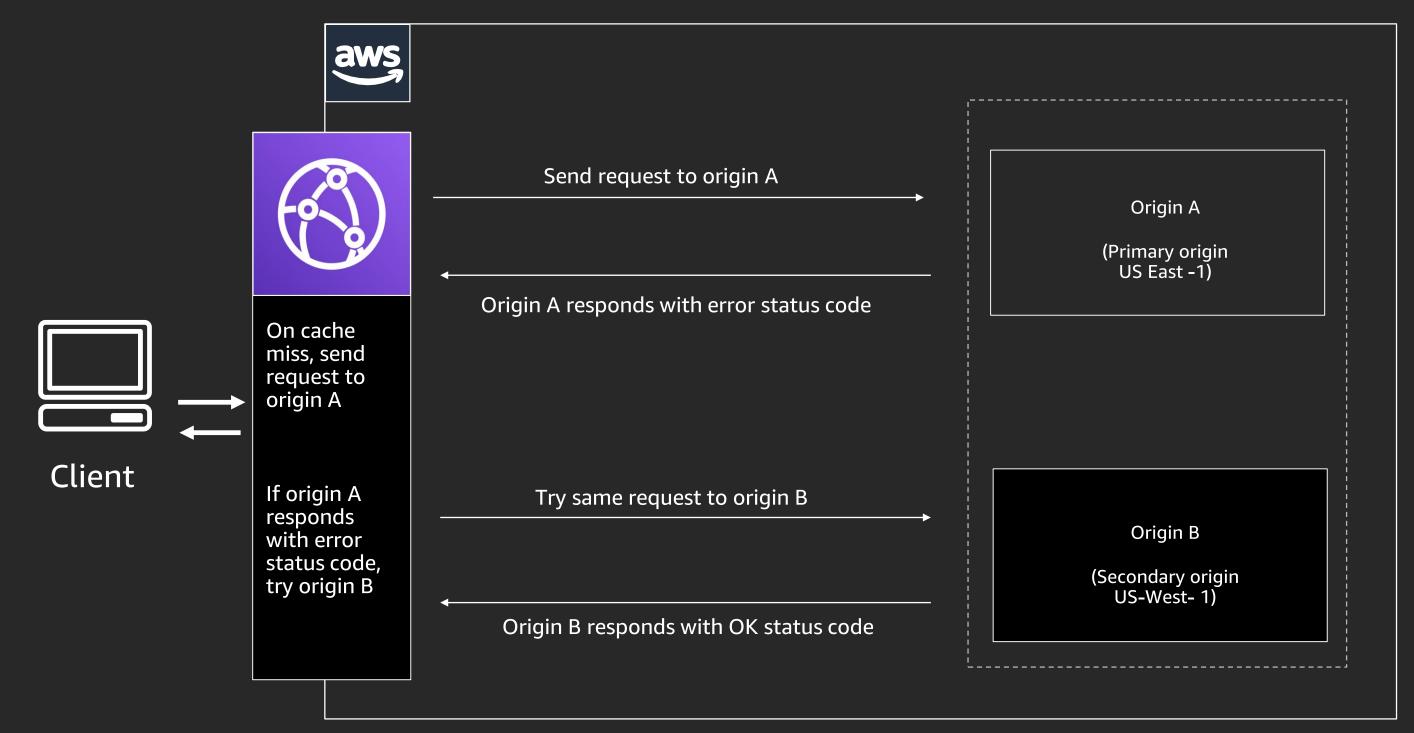
DNS based routing + CloudFront



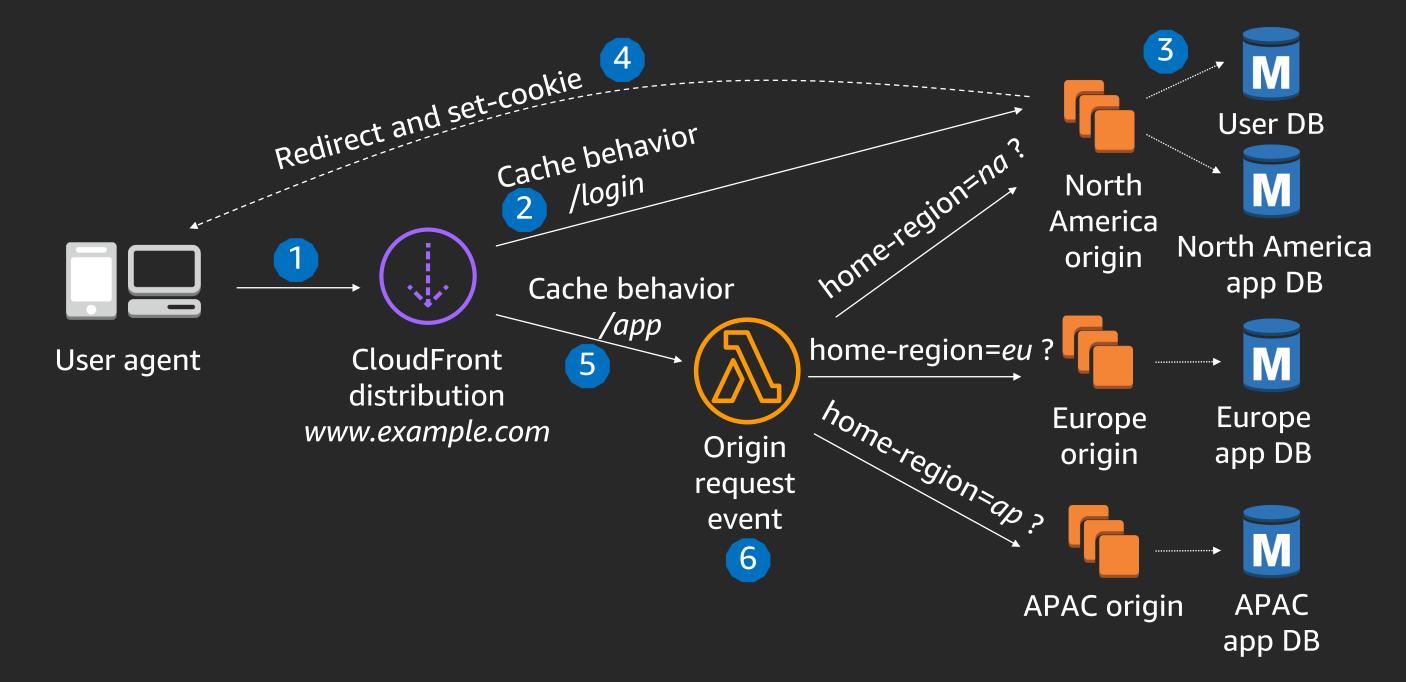
With Global Accelerator for instant failover



Origin failover



Cookie-based routing



Open discussion





Other considerations





Application stack failovers Region: us-east-1 ELB Aurora **Application** Persistence layer layer Region: us-west-1 Routing layer Amazon S3 Aurora ELB Amazon EC2

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Thank you!

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