



INDIA | MAY 25, 2023

# Multi-region highly available media broadcast playout

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Engineering Manager, Platform & Streaming TV  
Amagi Media Labs India

Maheshwaran.G

Specialist Solutions Architect, M & E  
AWS India

# Video application use cases



Public sector



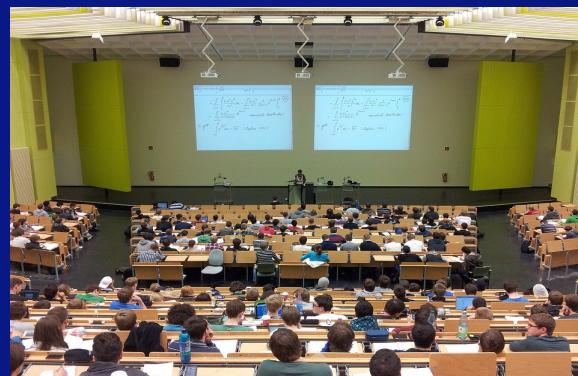
Live & VOD



Event



Pay TV



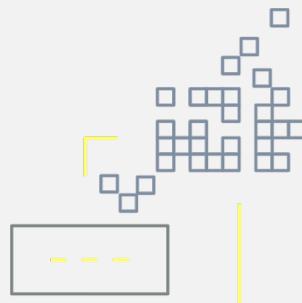
Classroom



Gaming

# How to build your video workflows on AWS

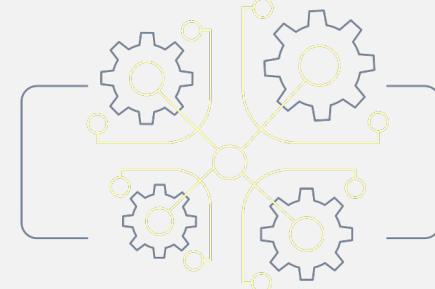
**Native**



**Partner**



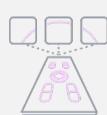
**Managed**



**AWS Media Solutions**



Media2Cloud

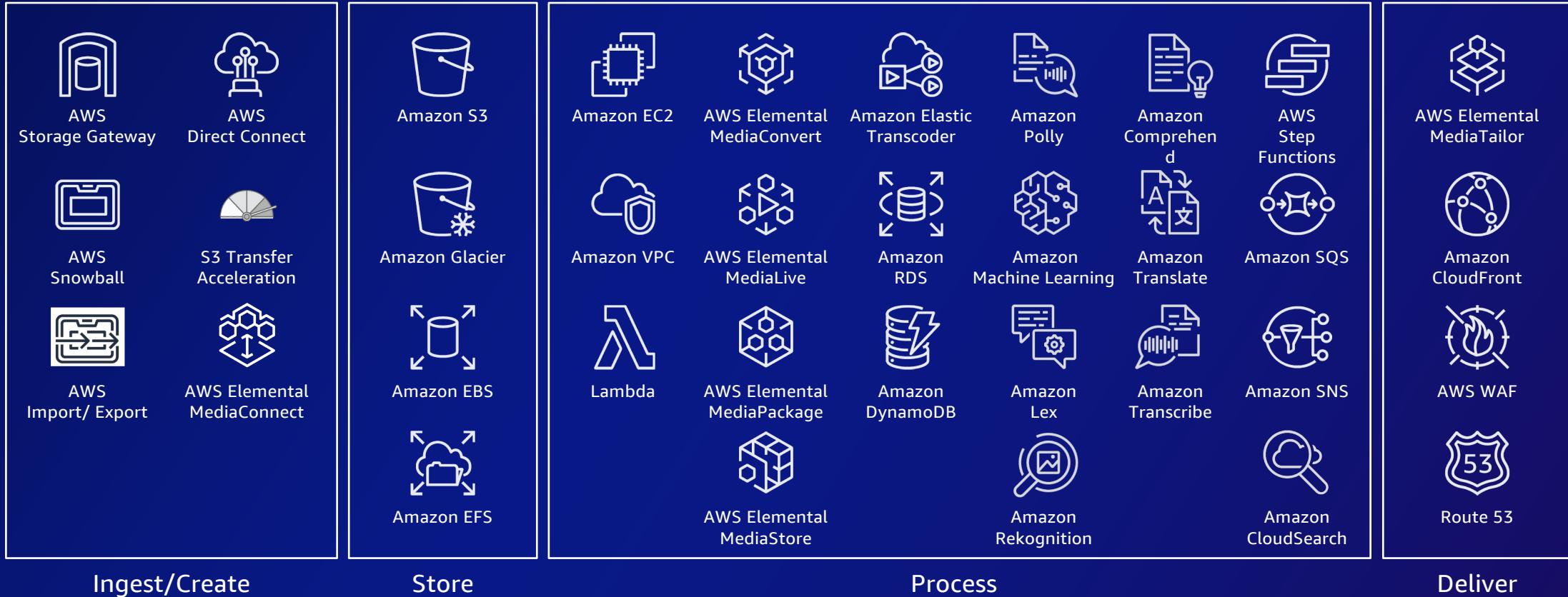


Live Streaming on AWS

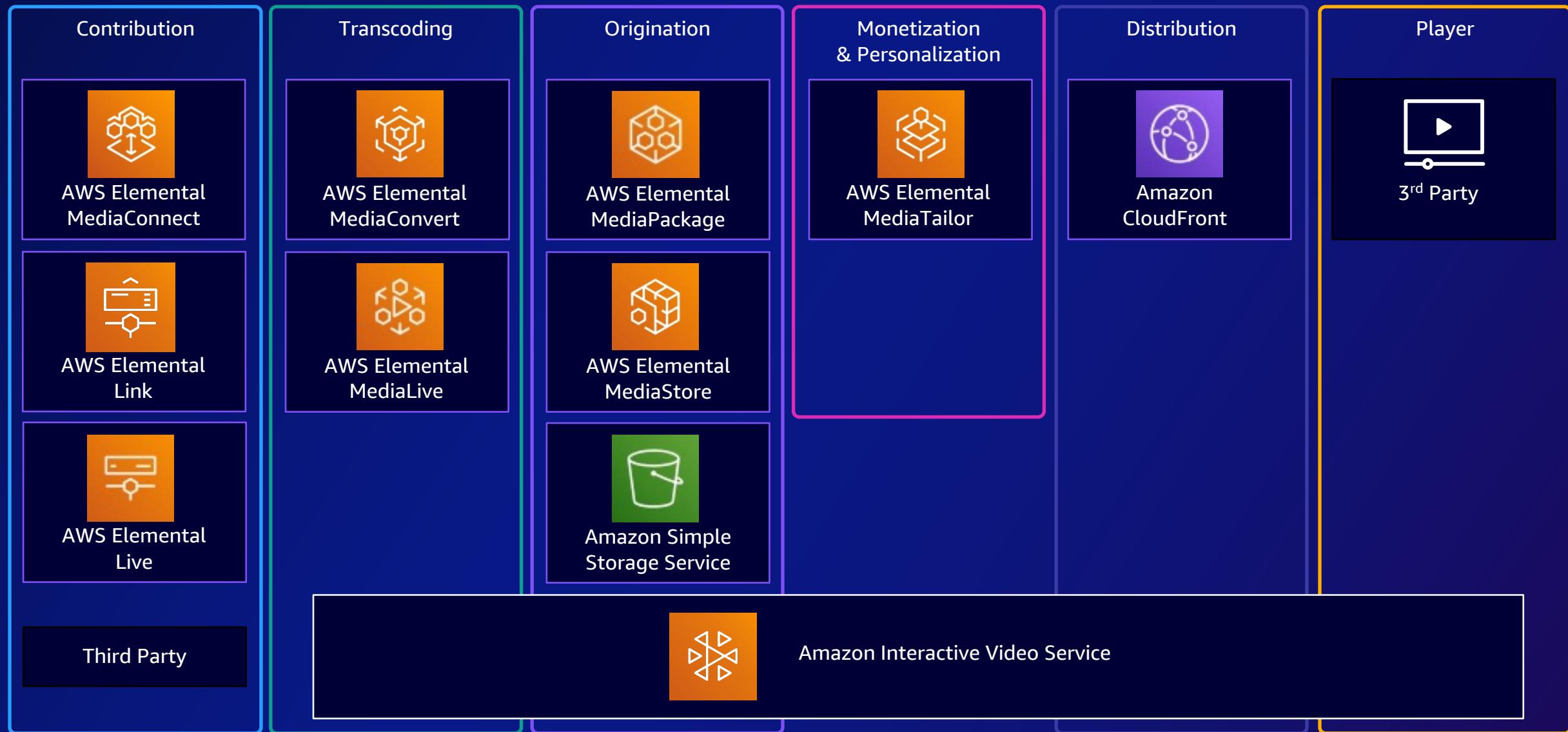


VOD on AWS

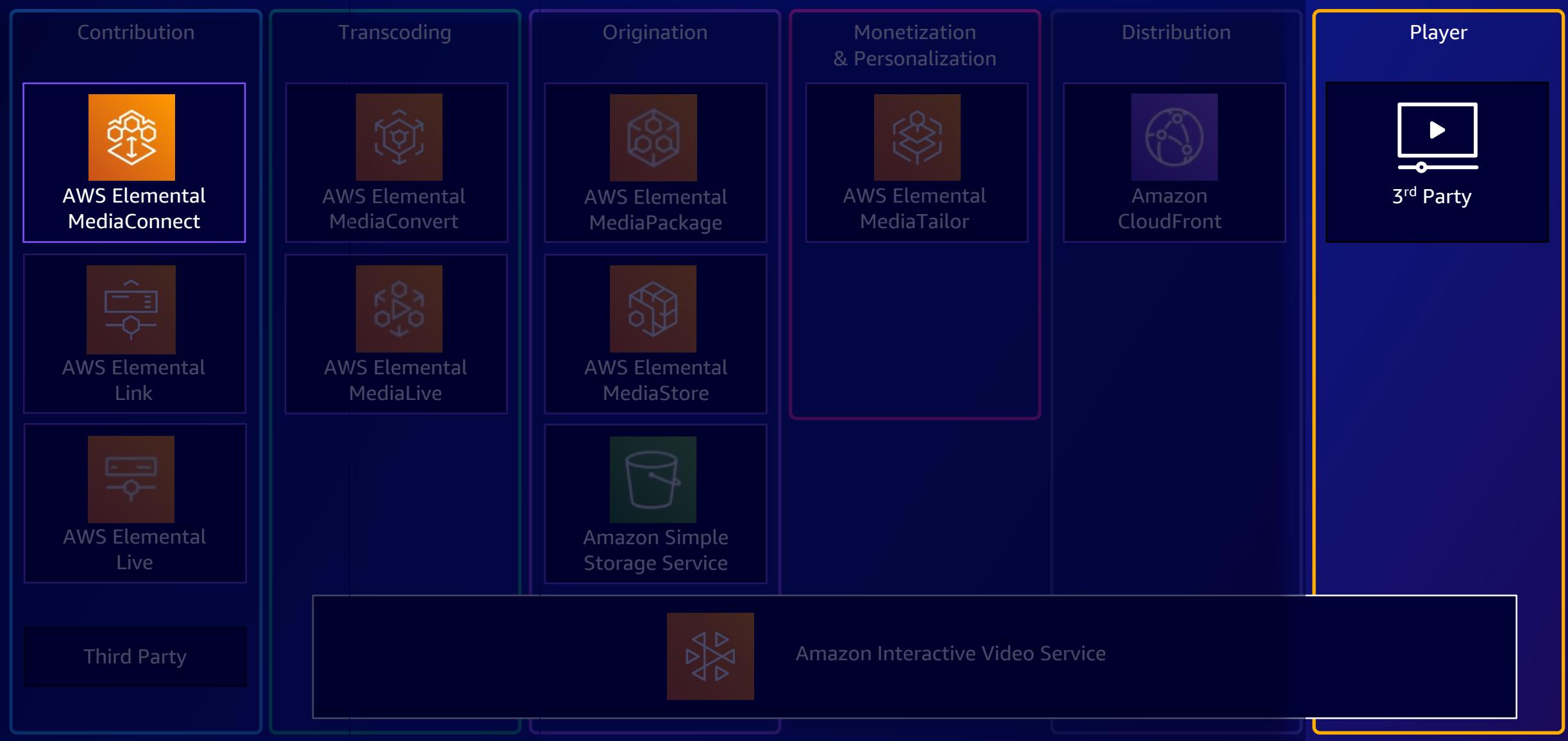
# Build with AWS Managed Services



# AWS Media Services



# AWS Media Services



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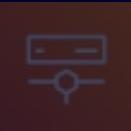
## Contribution



AWS Elemental MediaConnect



AWS Elemental Link



AWS Elemental Live

Third Party

## Transcoding



AWS Elemental MediaConvert



AWS Elemental MediaLive

## Origination



AWS Elemental MediaPackage



AWS Elemental MediaStore



Amazon Simple Storage Service

## Monetization & Personalization



AWS Elemental MediaTailor

## Distribution



Amazon CloudFront

## Player



3<sup>rd</sup> Party

Amazon Interactive Video Service

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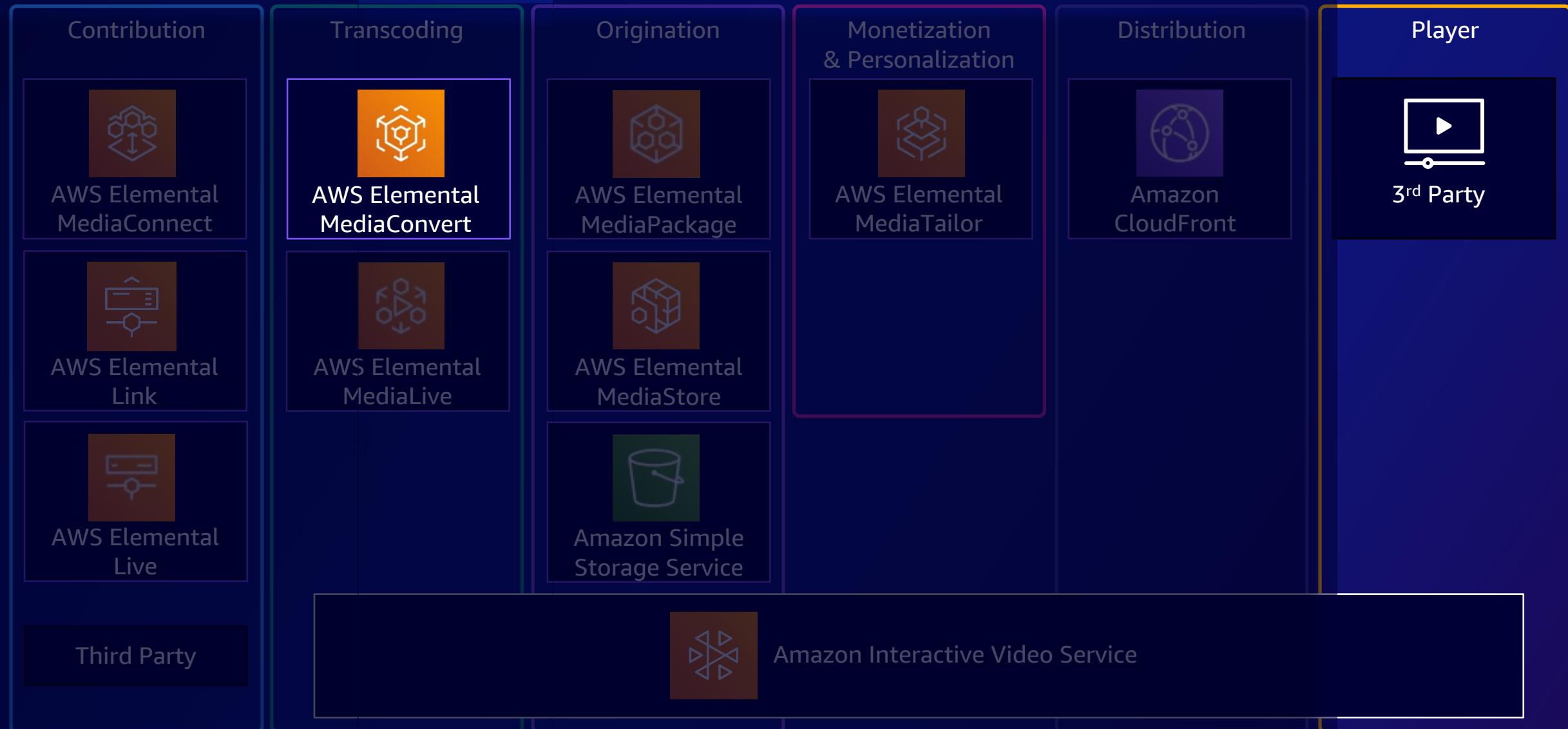
Amazon CloudFront



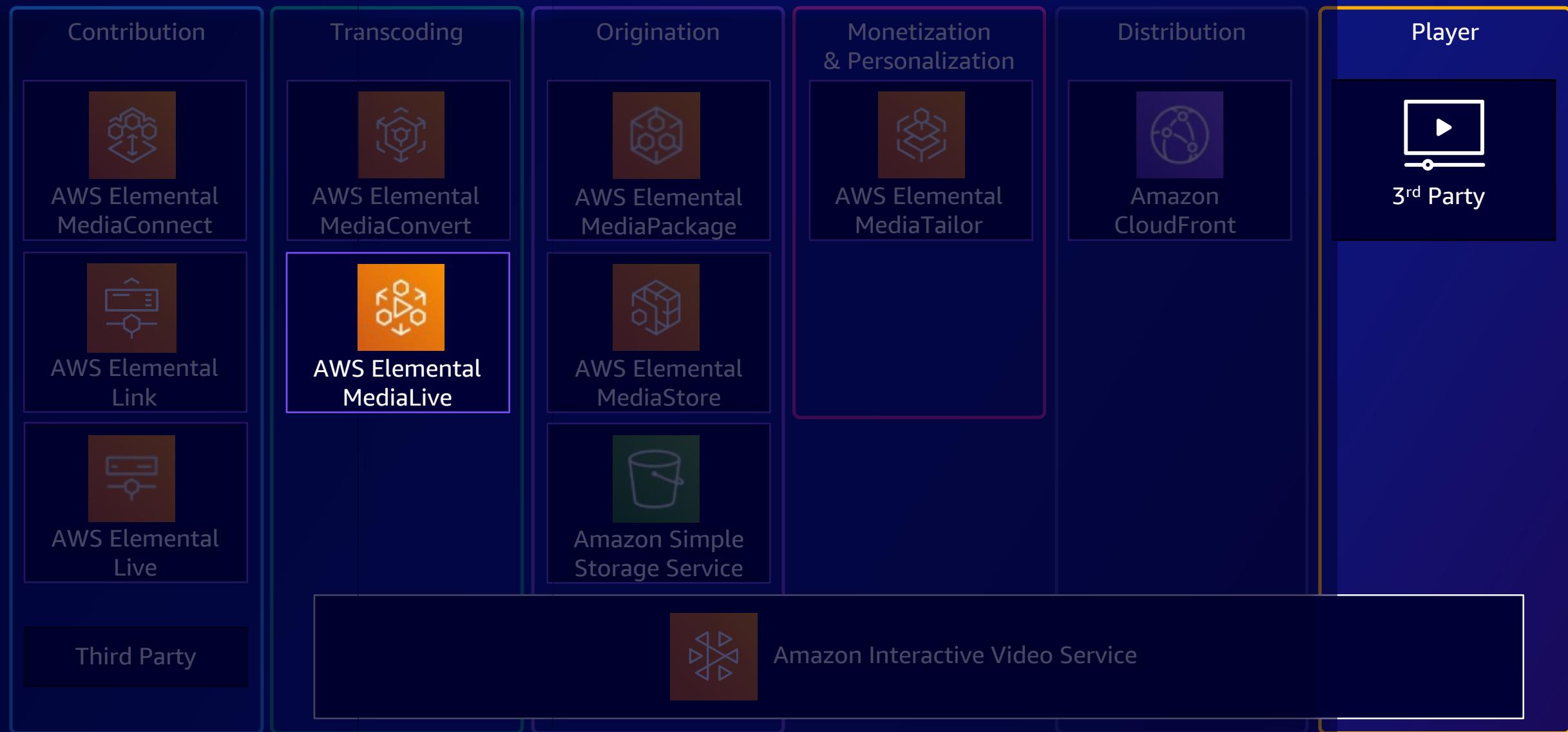
3<sup>rd</sup> Party

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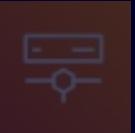
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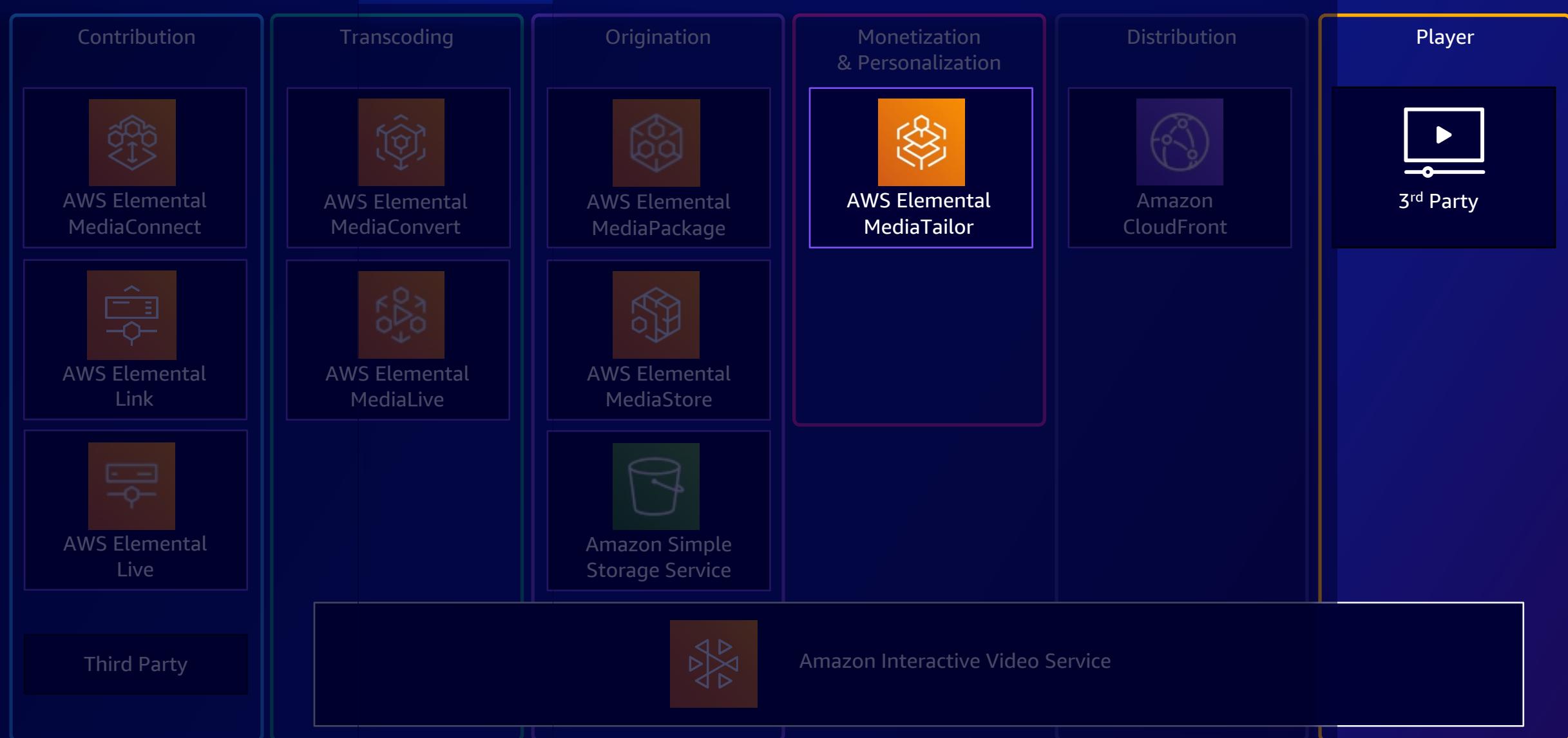
## Player



3<sup>rd</sup> Party

Amazon Interactive Video Service

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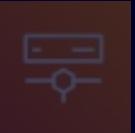
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3<sup>rd</sup> Party



Amazon Interactive Video Service

# amagi CLOUDPORT

Frame accurate, broadcast grade  
unified Live and VOD playout



## Broadcast Grade

Multiple inputs, frame-accurate breaks, graphics insertion, regionalized feeds, live2VOD, deferred live and breaking news scheduling.

## Flexible Workflows

Programmable and loosely coupled interfaces for integration of media, schedule, playout and reporting workflows.

## Lower TCO

Cloud-native and resource optimized.  
Multiple deployment models.



# amagi LIVE

UHD-ready live event playout,  
that is dynamically orchestrated.

## On-demand

The infrastructure comes up  
dynamically as per schedule,  
providing a low-cost solution

## End to end orchestrated

From taking live streams to  
handing it off, everything  
orchestrated dynamically in the  
cloud

## Simultaneous live streaming

Run as many parallel events as you  
want - control separately,  
together, or as you like

# Technology partner for leading broadcast networks...



**VICELAND**

**TURNER**

**beIN**

# ... and fast tv

Sports

beIN

IMG

fubo<sup>TV</sup>

CSIV



SPORTSGRID

Lifestyle

CONDÉ NAST

TASTEMADE

People<sup>TV</sup>

gusto<sup>tv</sup>

TV/  
Documentary

CuriosityStream

CINEDIGM



VICELAND



Kids/Music/  
Others

pocket.watch

LATIDO<sup>MUSIC</sup>

MUSIC  
BAE BLE



Movies



GUNPOWDER  
& SKY

THE ASYLUM

News

TYT NETWORK

YAHOO!  
FINANCE

RedSeat  
VENTURES

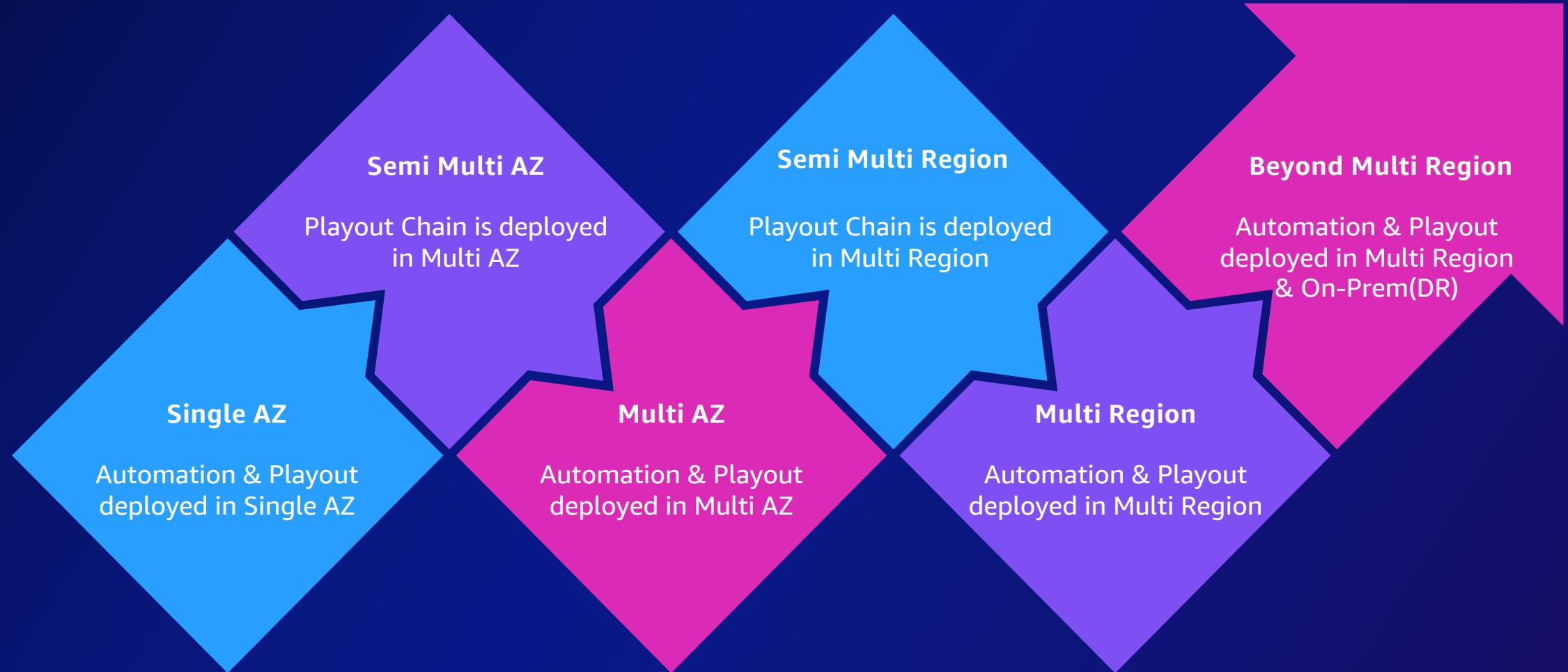
# Key milestones

## Major Live events

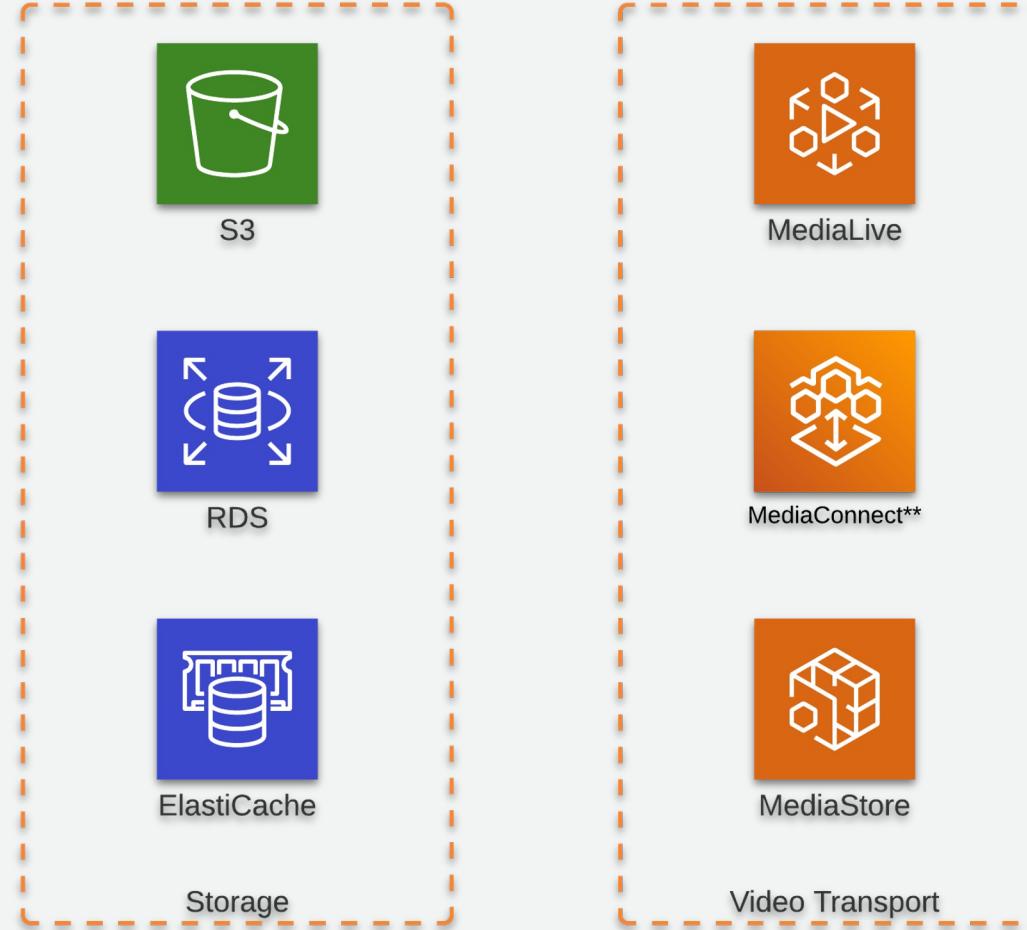
- Tokyo Olympics 2020 - July 2021
- Super Bowl LVI - February 2022
- Oscar 2022 - March 2022
- FIFA World Cup - November 2022
- Oscar 2023 - March 2023



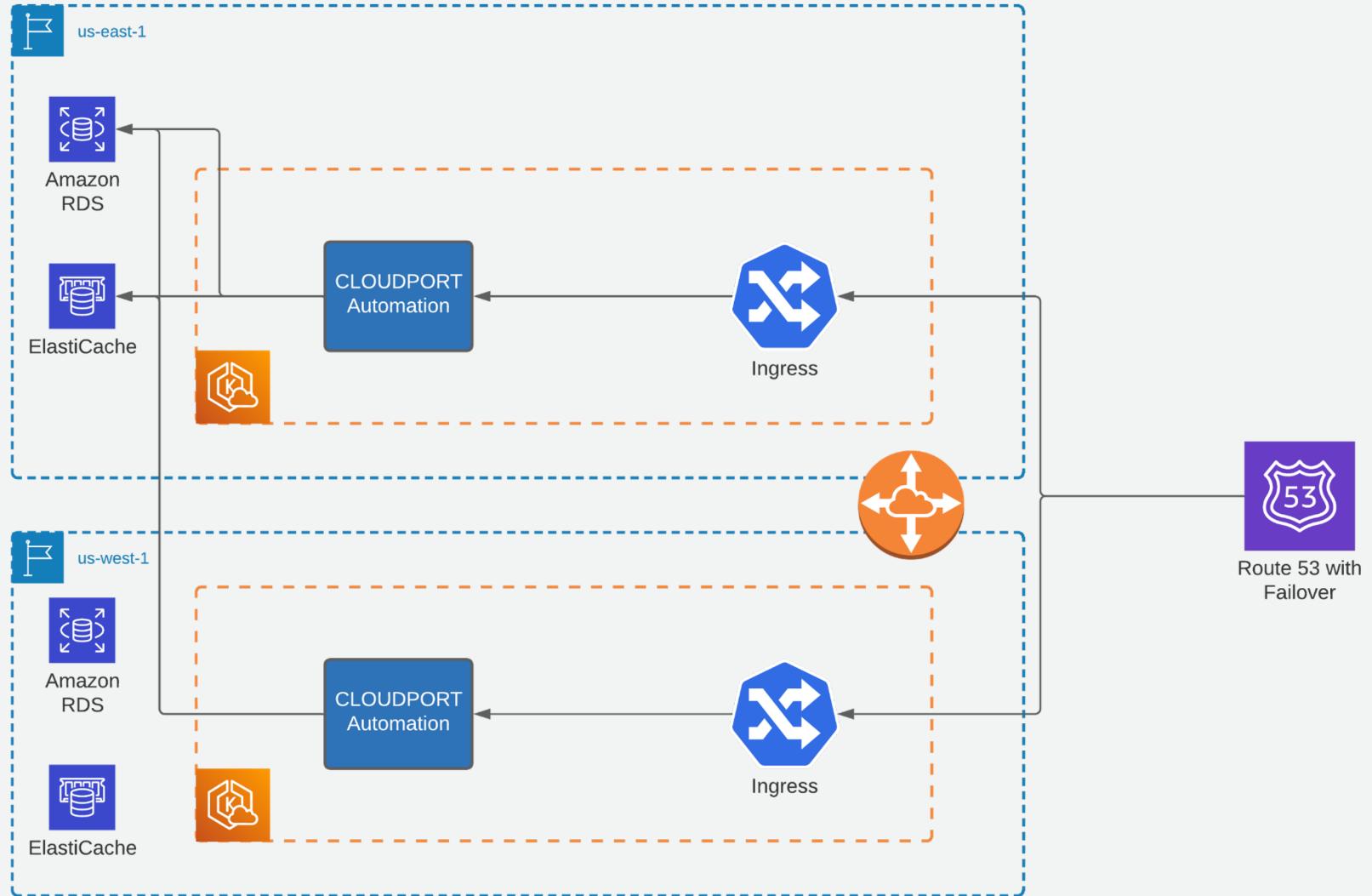
# Redundancy: Just the right amount



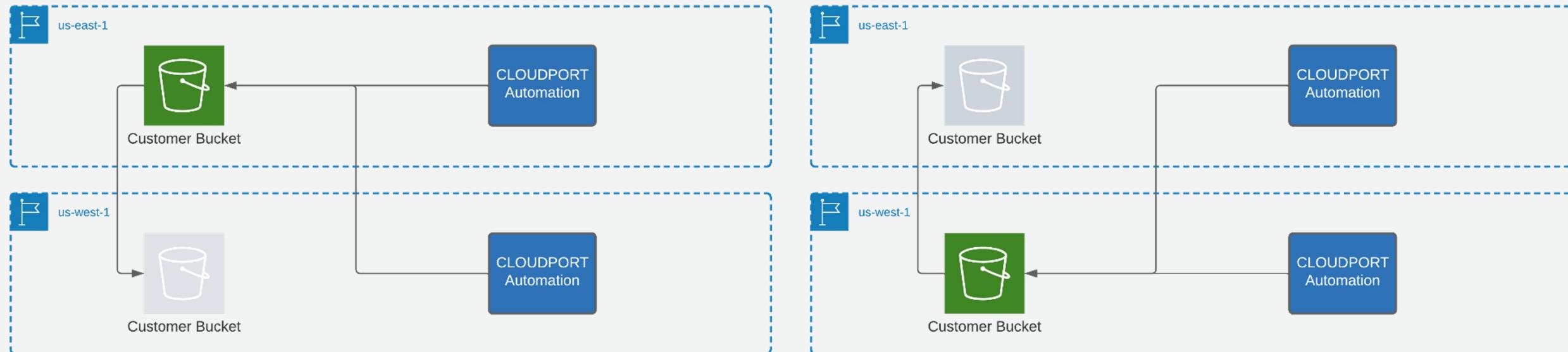
# Multi AZ: The redundancy sweet spot



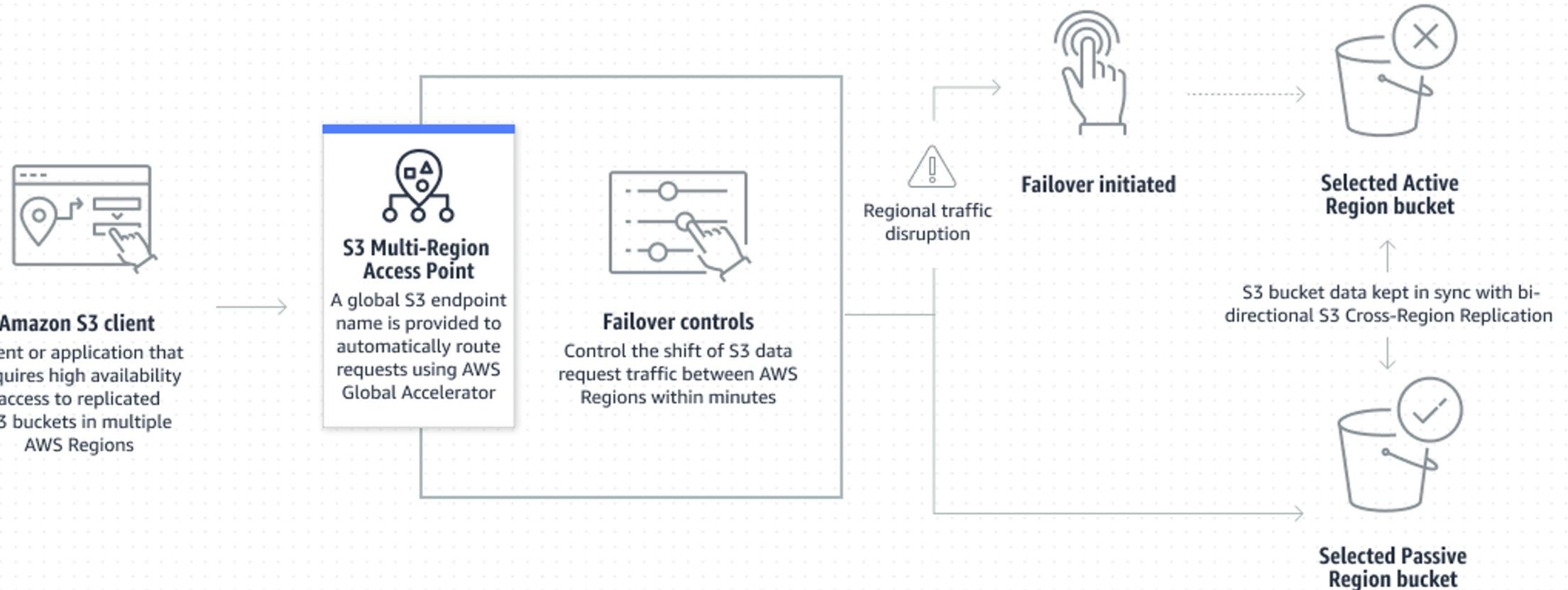
# Cross region redundancy - Region, VPC, Kubernetes



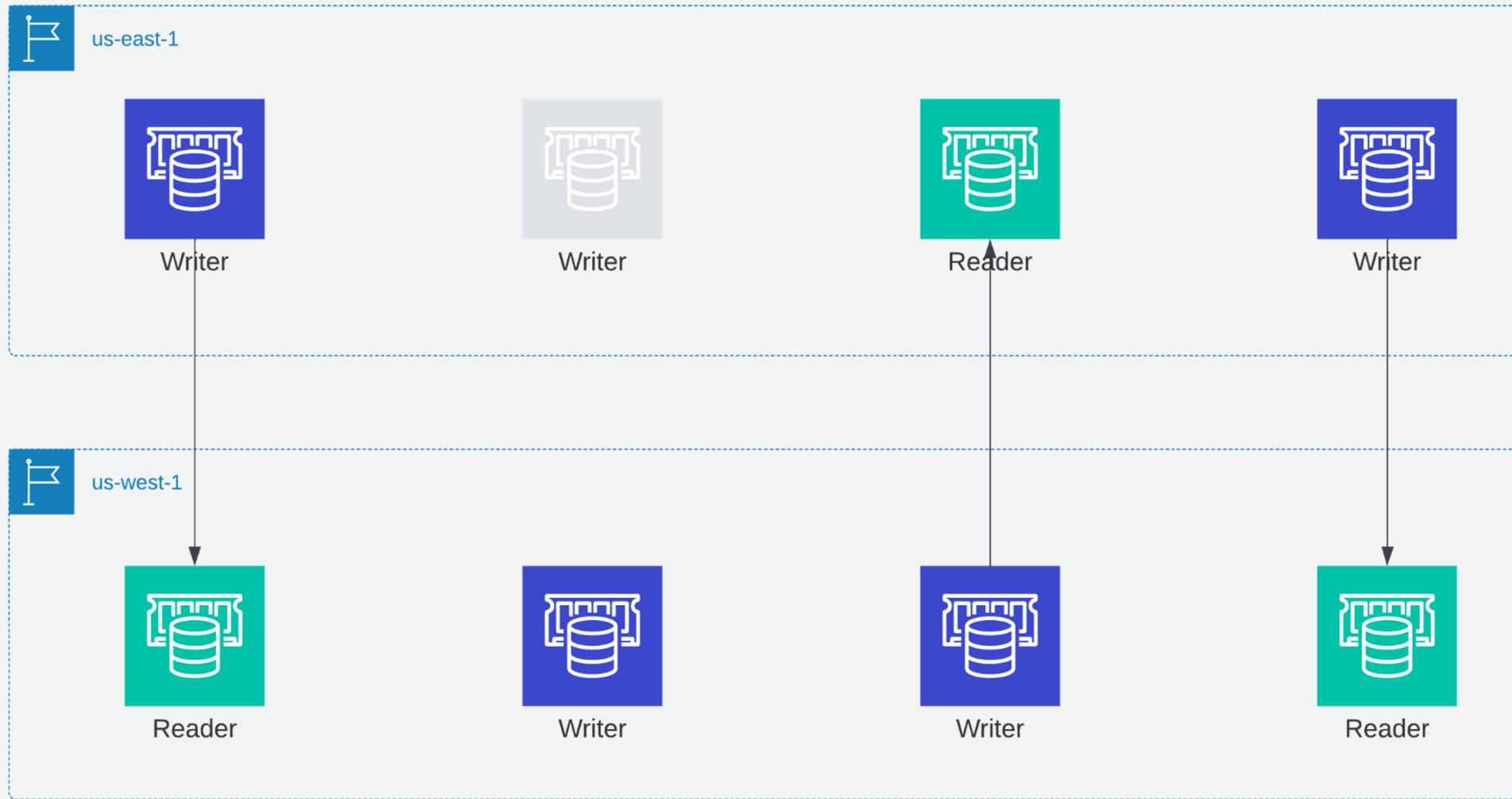
# S3: Failover & Failback



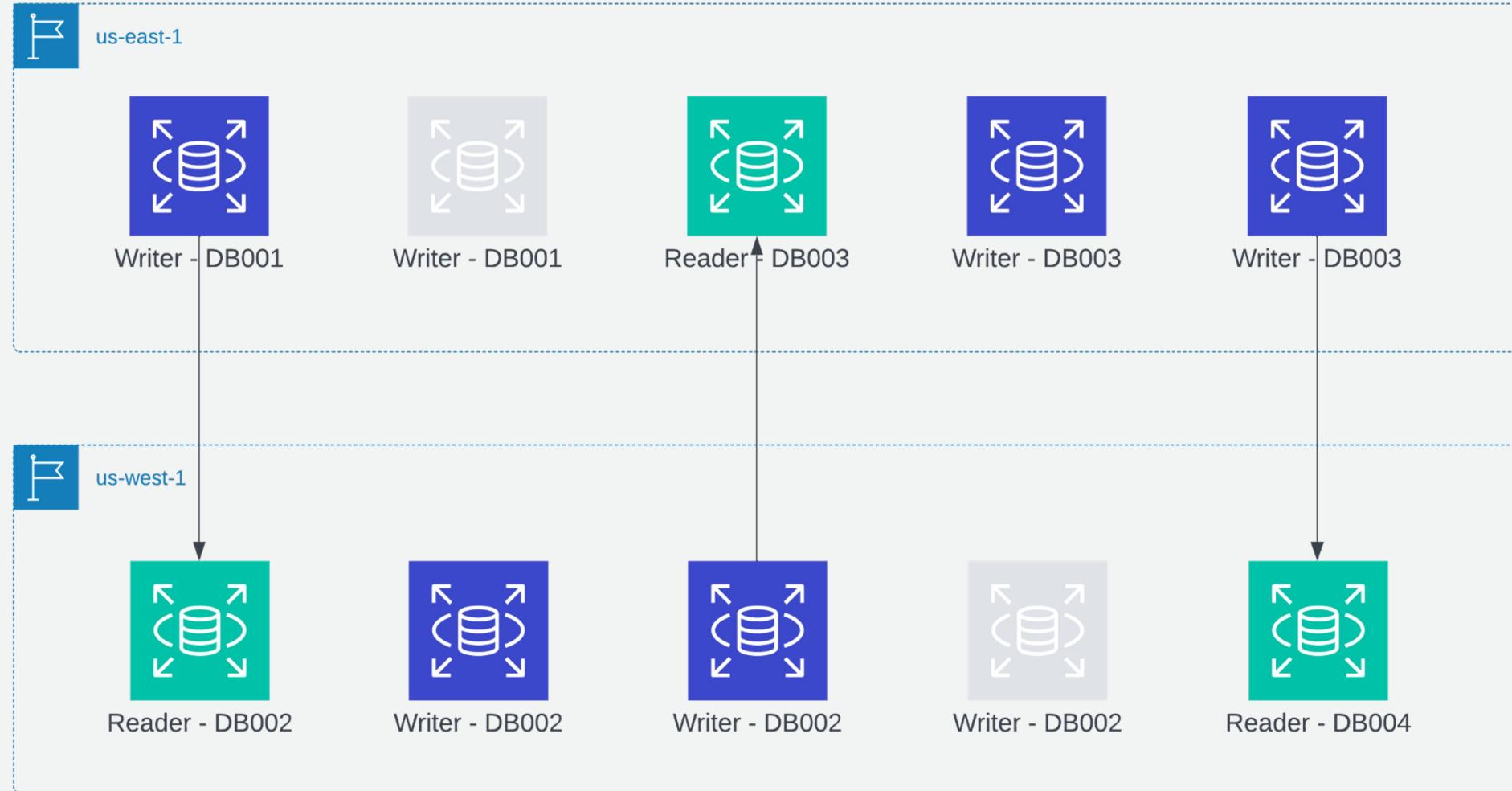
# S3: Failover & Fallback



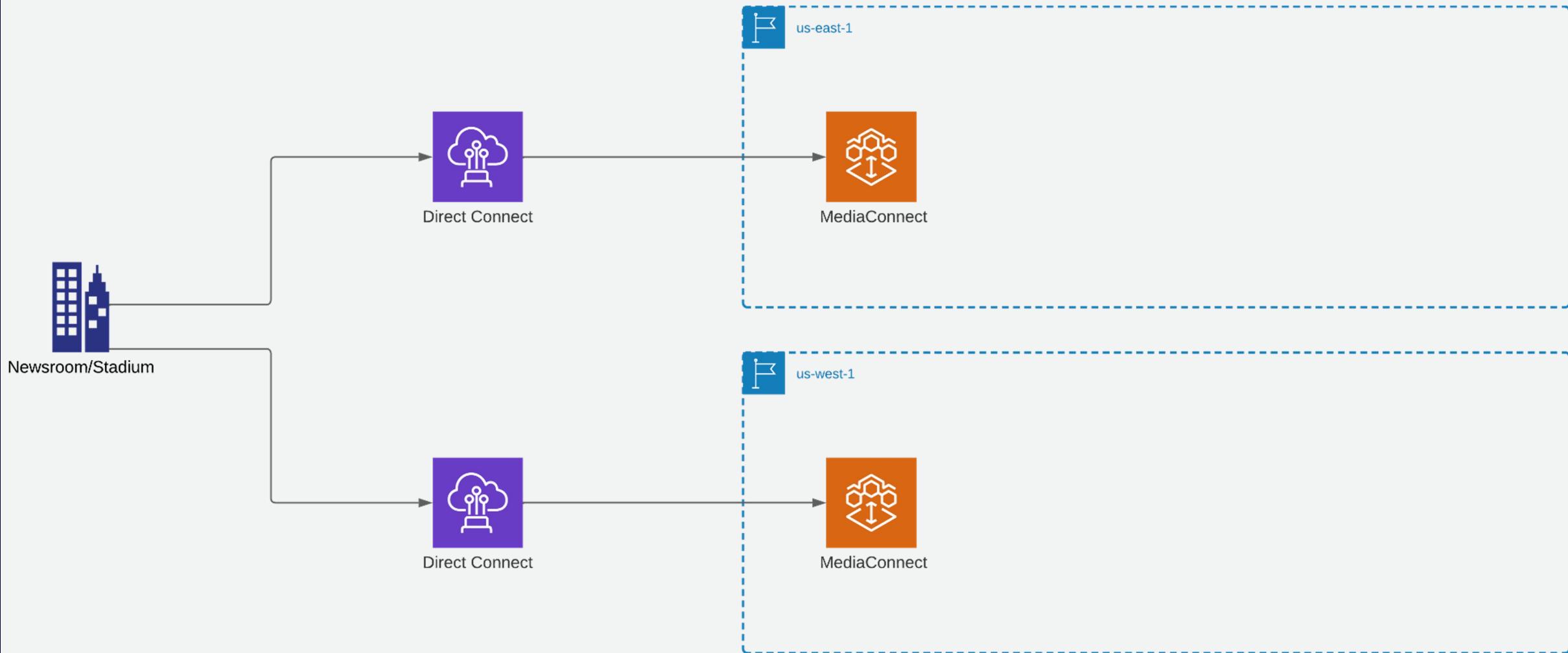
# ElastiCache: Failover & Failback



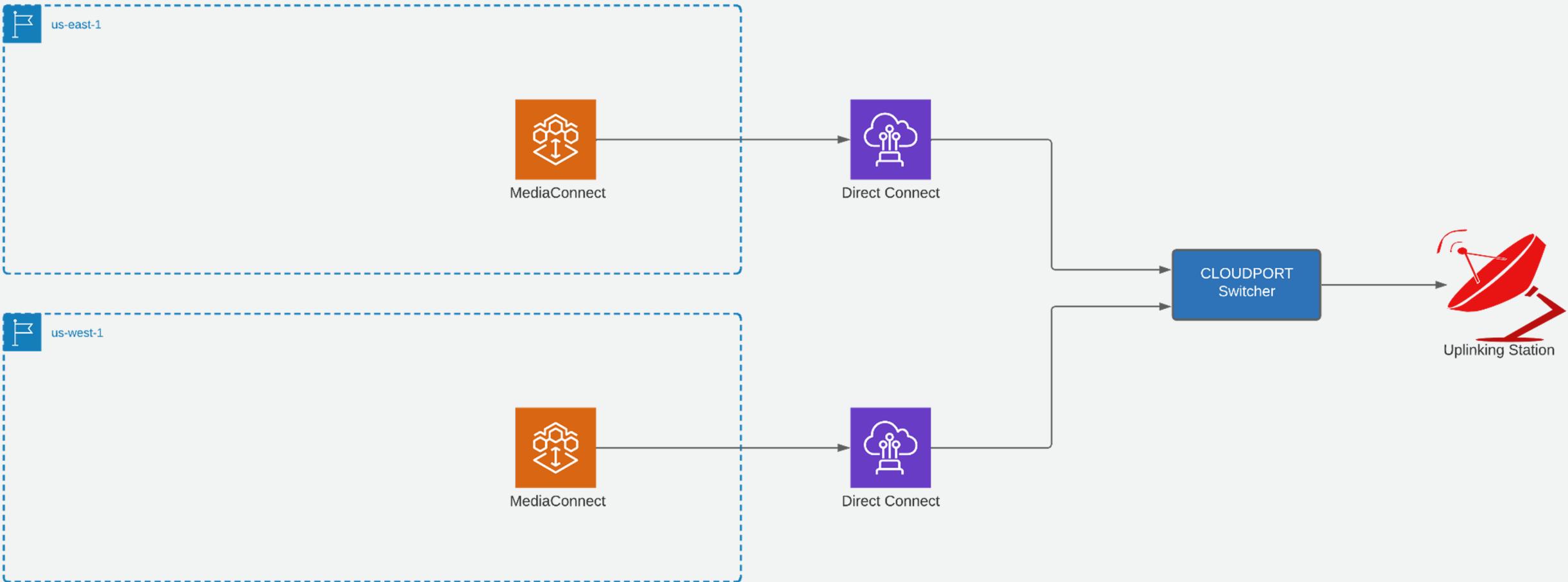
# RDS: Failover & Failback



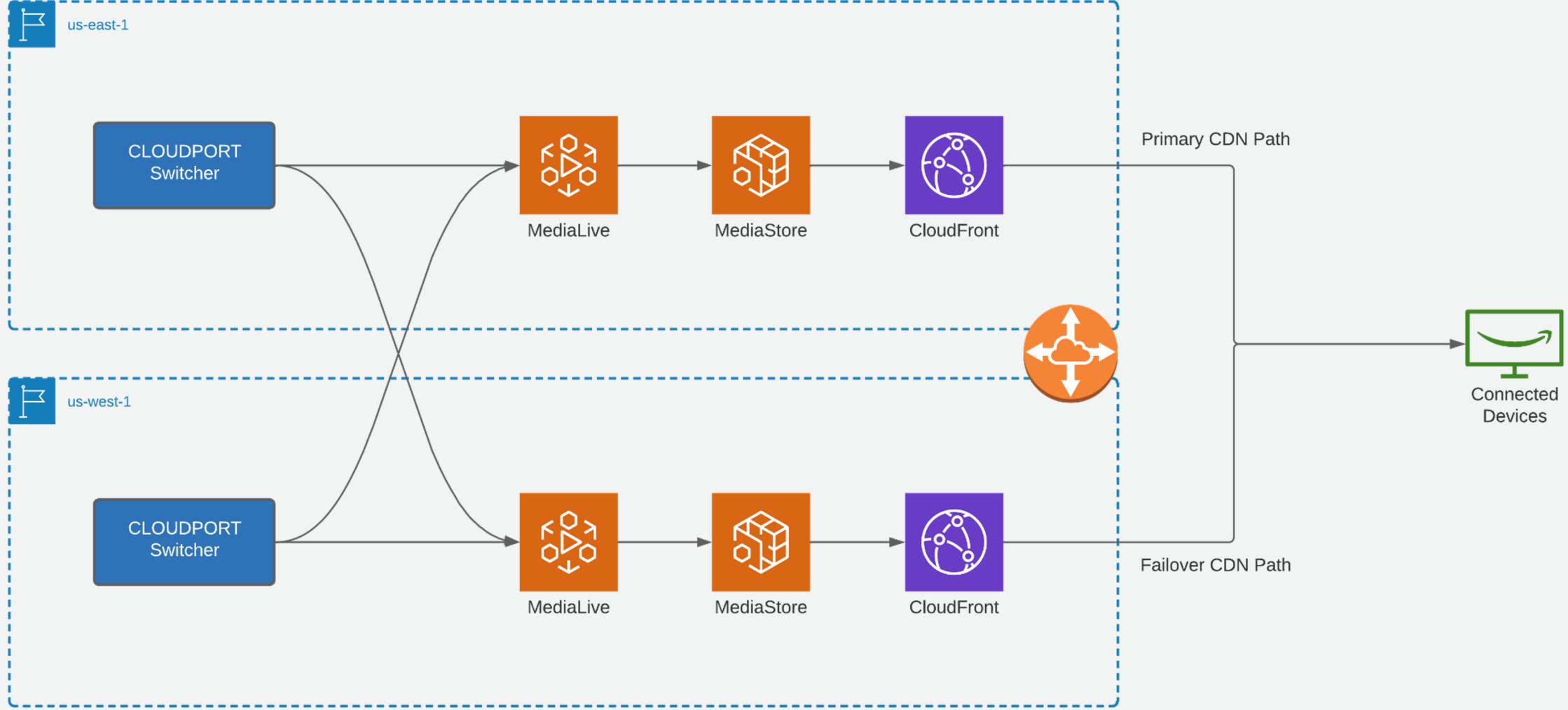
# MediaConnect ground to cloud: Redundancy



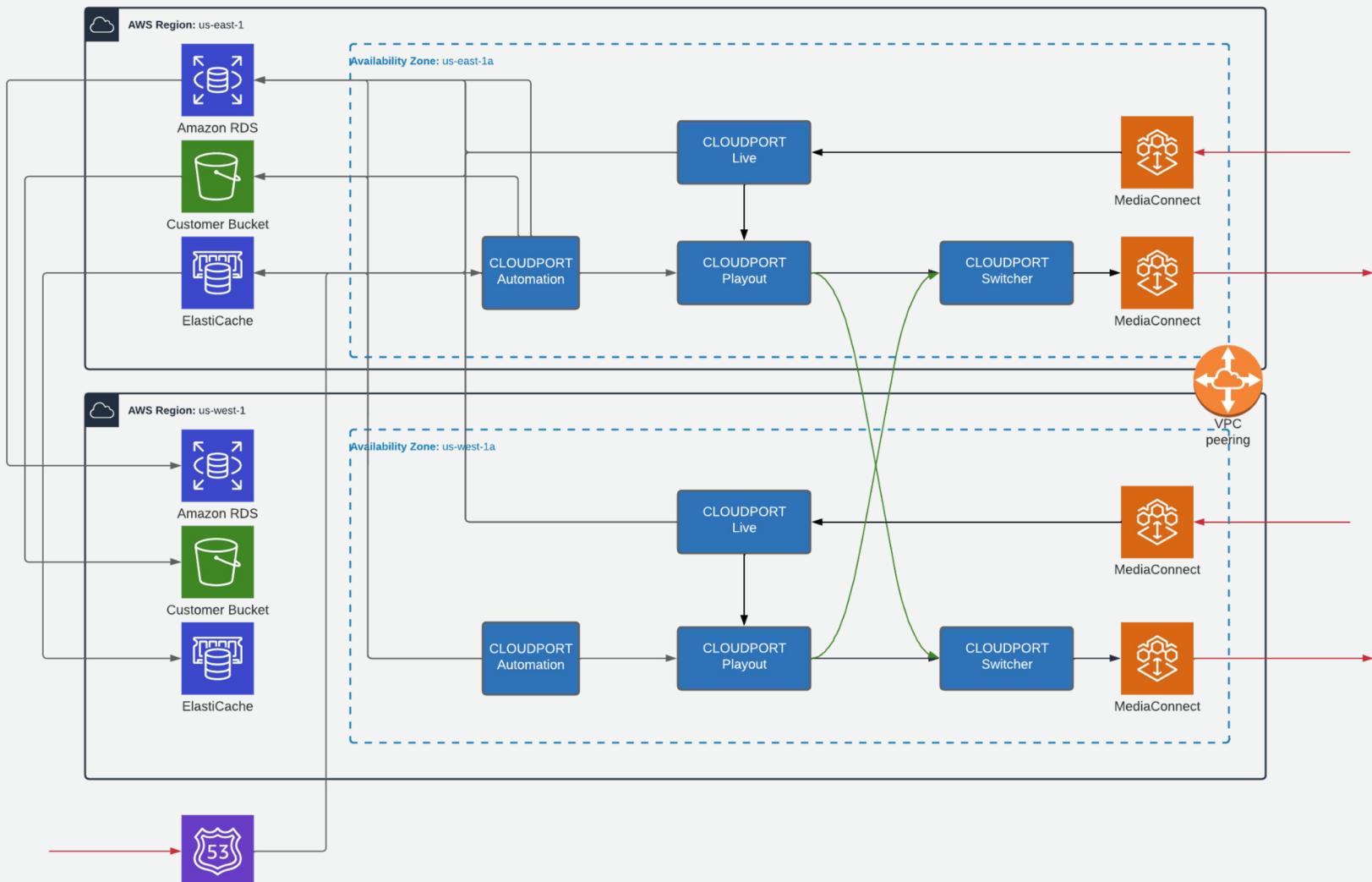
# MediaConnect cloud to ground: Redundancy



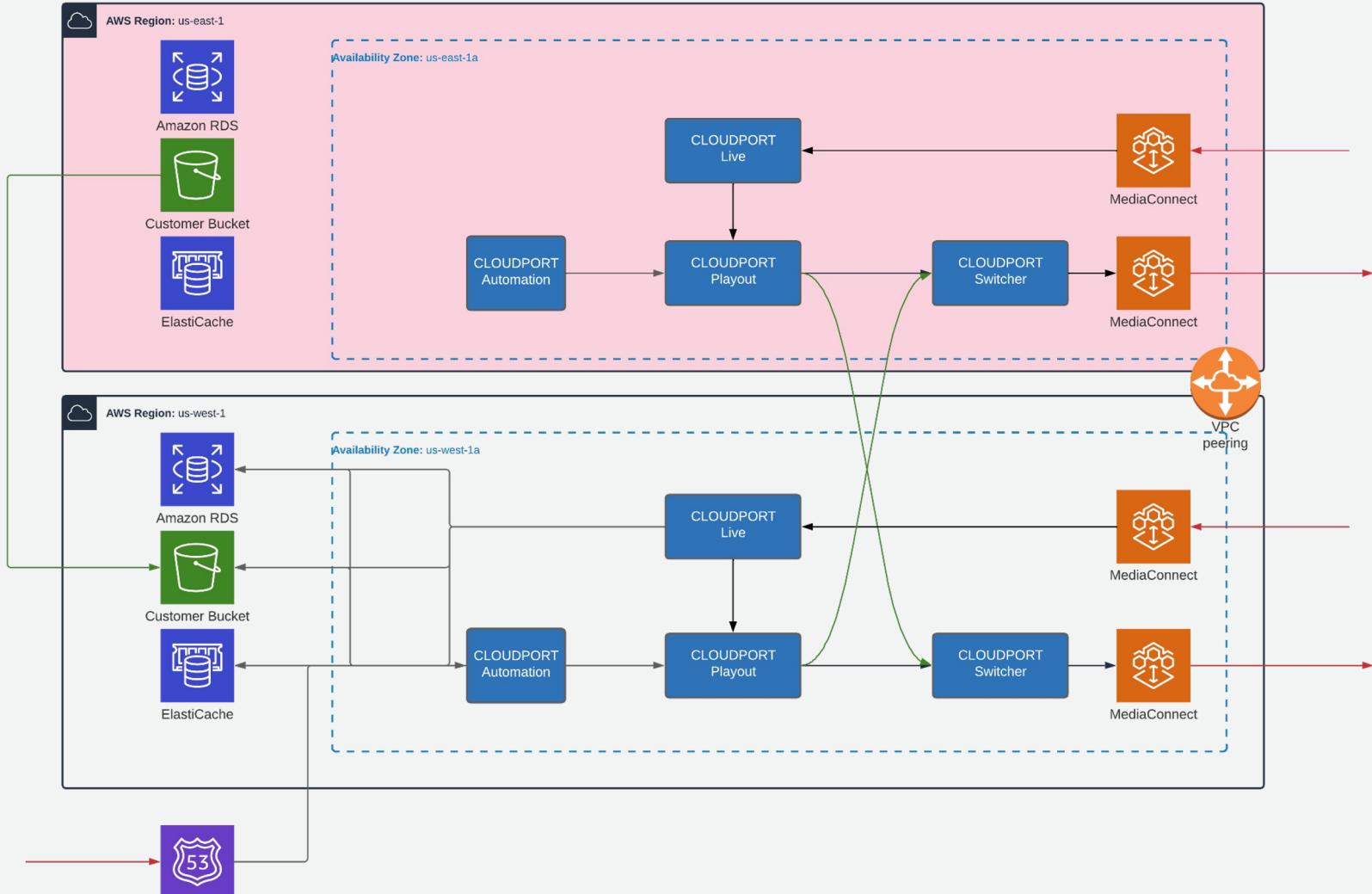
# MediaLive redundancy



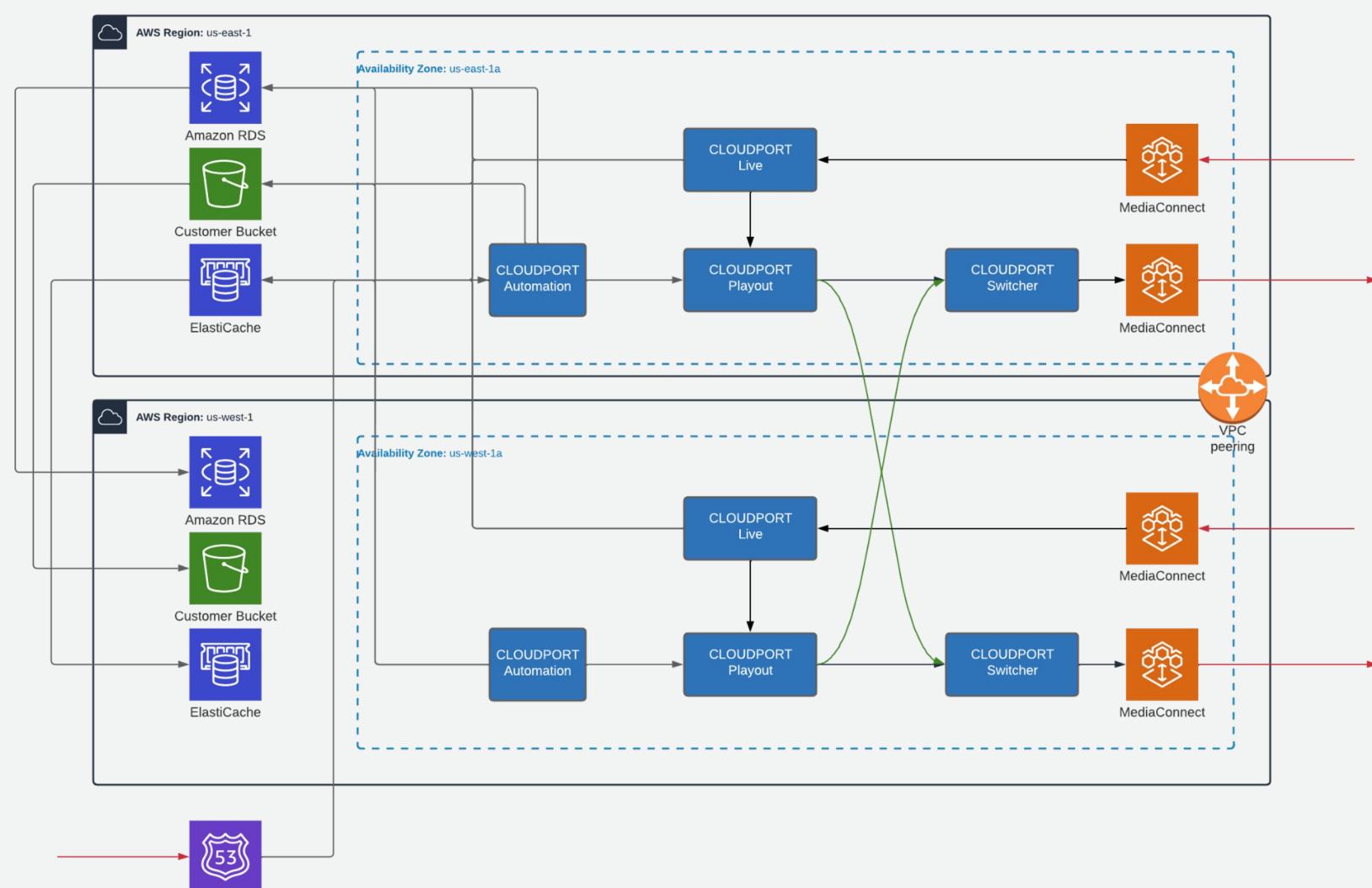
# Multi-region playout redundancy



# Multi-region playout redundancy: Failover



# Multi-region playout redundancy: Failback



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# Thank you!



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