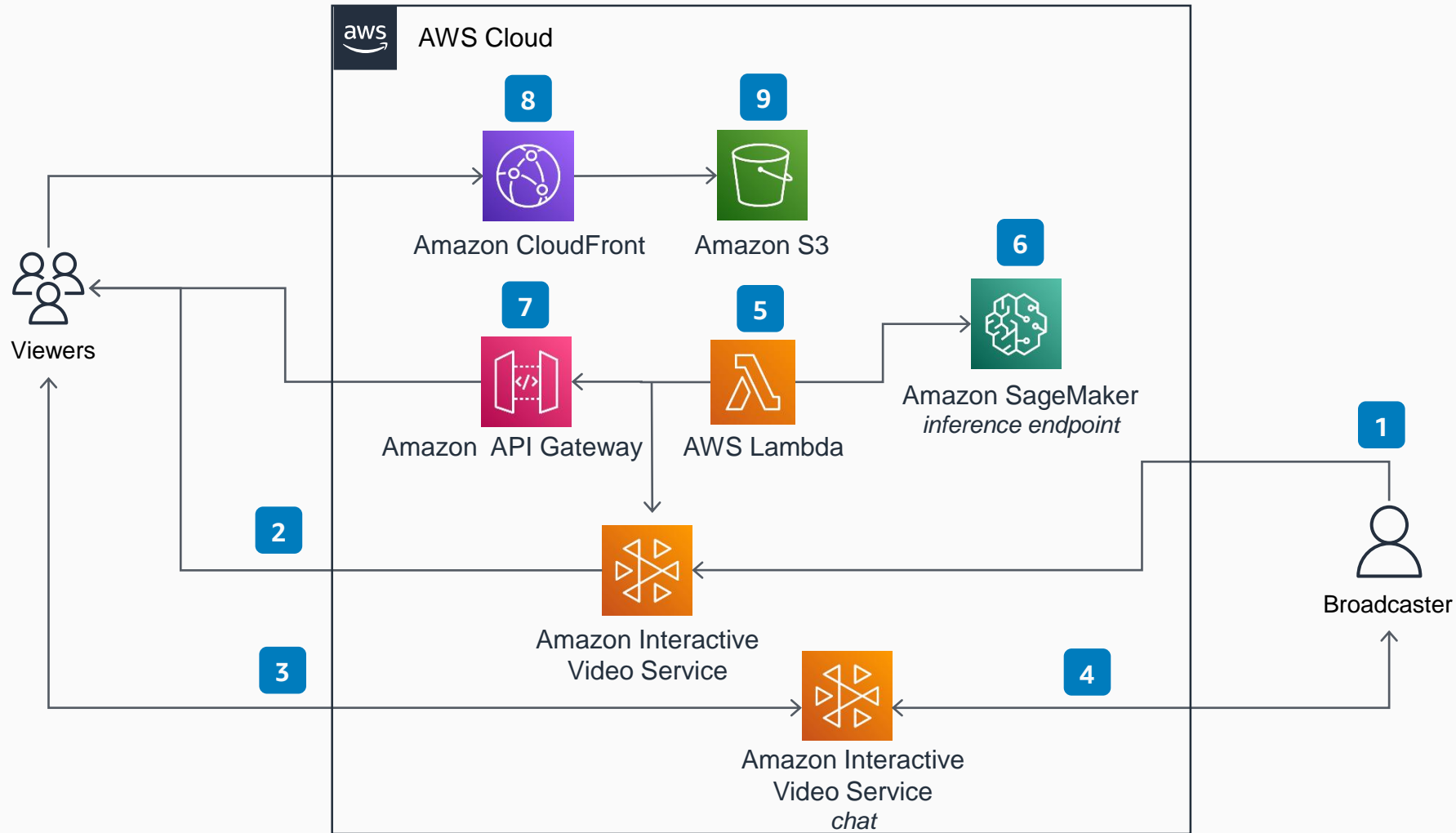


Guidance for Live Streaming for Retail on AWS

Live streaming near real-time product reviews

This architecture shows the delivery of near real-time product reviews with interactive chat, and auto-discovered product data that is pushed to viewers.



- 1 Live product review is streamed to **Amazon Interactive Video Service** (Amazon IVS).
- 2 Video is streamed in near real-time to viewers watching on browsers and mobile devices.
- 3 Viewers are able to chat with each other and the broadcaster in near real-time with the **Amazon IVS Chat** service.
- 4 Broadcaster or support staff can moderate the chat and respond to viewers in near real-time.
- 5 **AWS Lambda** is used to continuously extract video frames from live streams to identify products in the scene.
- 6 Image frames are sent to a custom product detection artificial intelligence (AI) or machine learning (ML) model hosted on an **Amazon SageMaker** inference endpoint. Discovered products are returned to **Lambda**.
- 7 Products in scene are pushed through **WebSocket APIs** in **Amazon API Gateway** with connections to viewers in near real-time.
- 8 Viewer devices, including browsers or mobile devices, download product images from **Amazon CloudFront**.
- 9 **CloudFront** uses **Amazon Simple Storage Service** (Amazon S3) as the origin for product images.