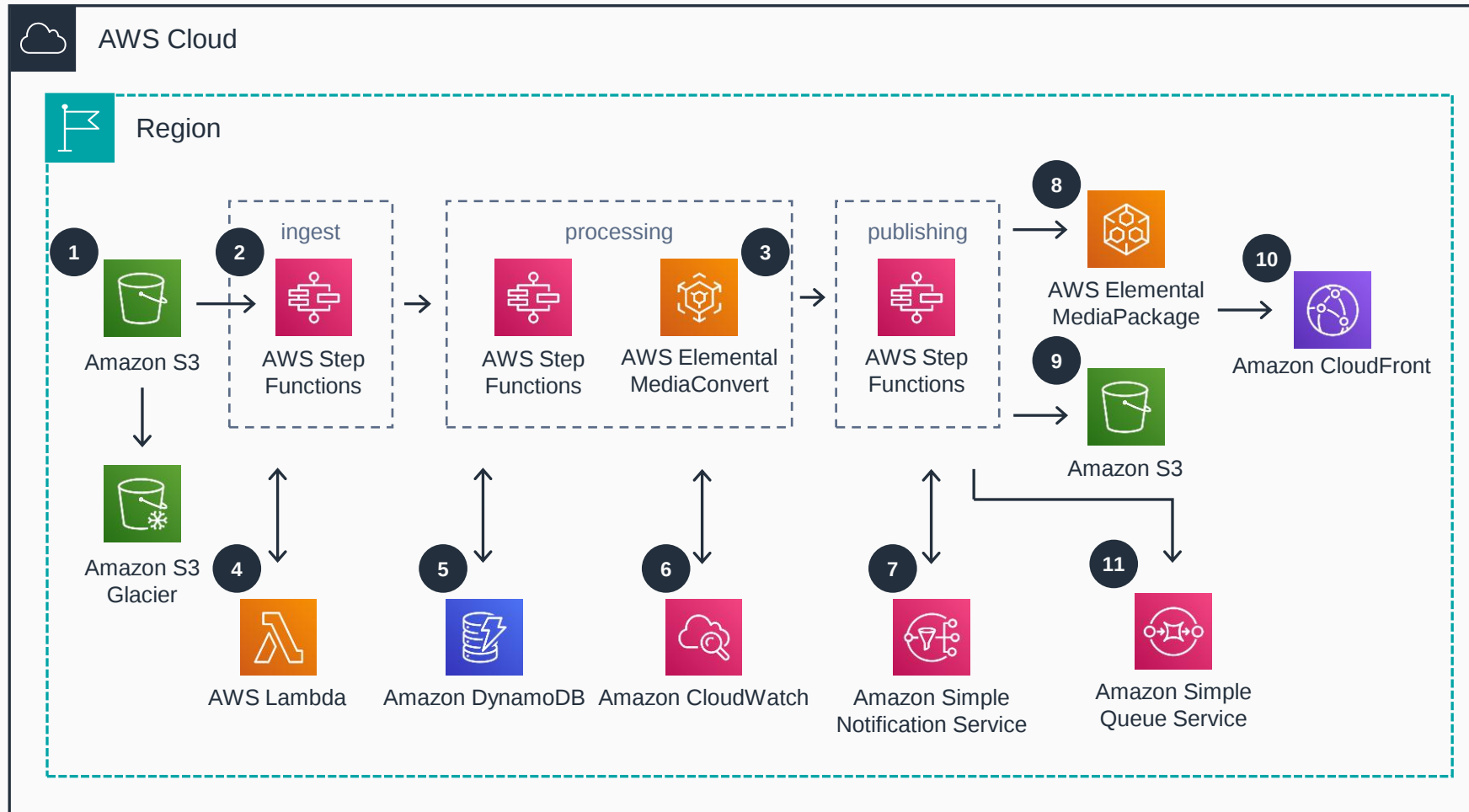


Guidance for Video-on-demand on AWS

This architecture diagram illustrates how to effectively support video-on-demand on AWS. It shows the AWS services necessary to build a scalable, distributed workflow to ingest, store, process, and deliver video content on demand. It generates content for playback on a wide range of devices, stores the transcoded media files, and delivers the videos to end users through Amazon CloudFront.



- 1 Store source media files in an **Amazon Simple Storage Service (Amazon S3)** bucket. Content is eventually transitioned to **Amazon S3 Glacier** following an **Amazon S3** lifecycle policy.
- 2 **AWS Step Functions** state machines orchestrate ingest, processing, and publishing workflows.
- 3 **AWS Elemental MediaConvert** transcodes media files from their source format into popular distribution formats such as HLS and DASH.
- 4 A collection of **AWS Lambda** functions perform the work of each step, and process error messages.
- 5 Store metadata captured through the workflow in **Amazon DynamoDB**.
- 6 **Amazon CloudWatch** is used for logging and **Amazon CloudWatch Events** rules for **AWS Elemental MediaConvert** notifications.
- 7 **Amazon Simple Notification Service (Amazon SNS)** topics publish encoding, publishing, and error notifications.
- 8 **AWS Elemental MediaPackage** (optional) creates video streams formatted to play on several devices from a single video input.
- 9 **Amazon S3** bucket stores distribution media files.
- 10 **Amazon CloudFront** distribution delivers video content to end users.
- 11 An **Amazon Simple Queue Service (Amazon SQS)** queue captures the workflow outputs.

