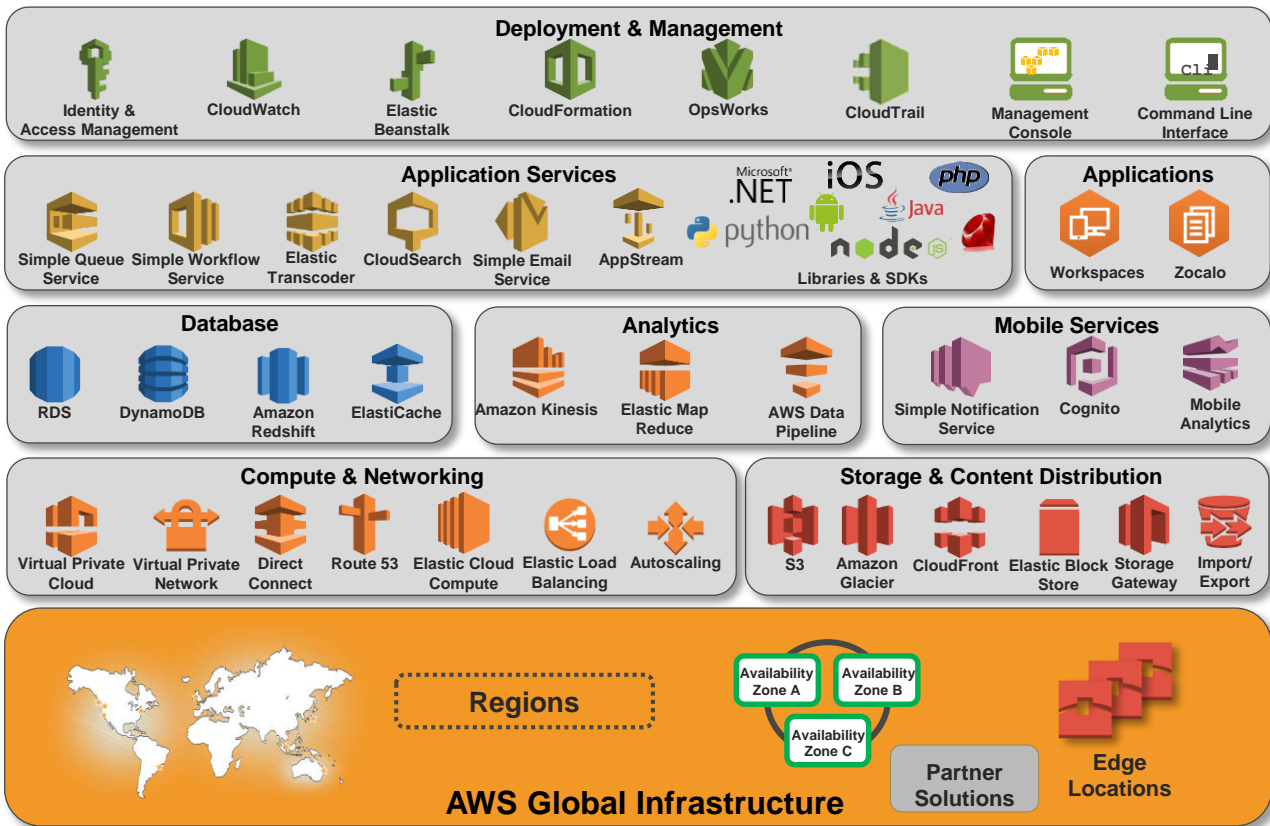


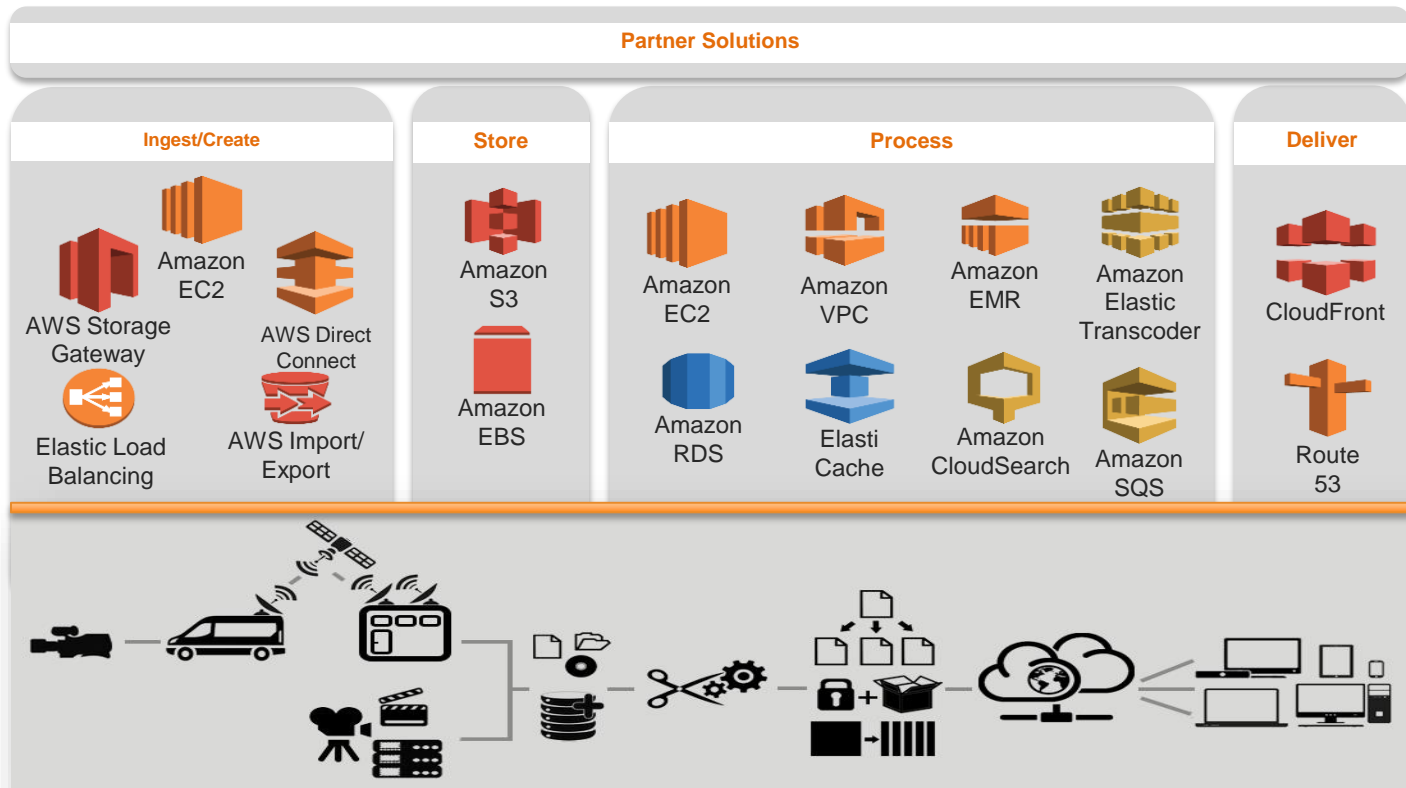
Digital Media Workflows on AWS

Usman Shakeel
Principal Solutions Architect
Amazon Web Services

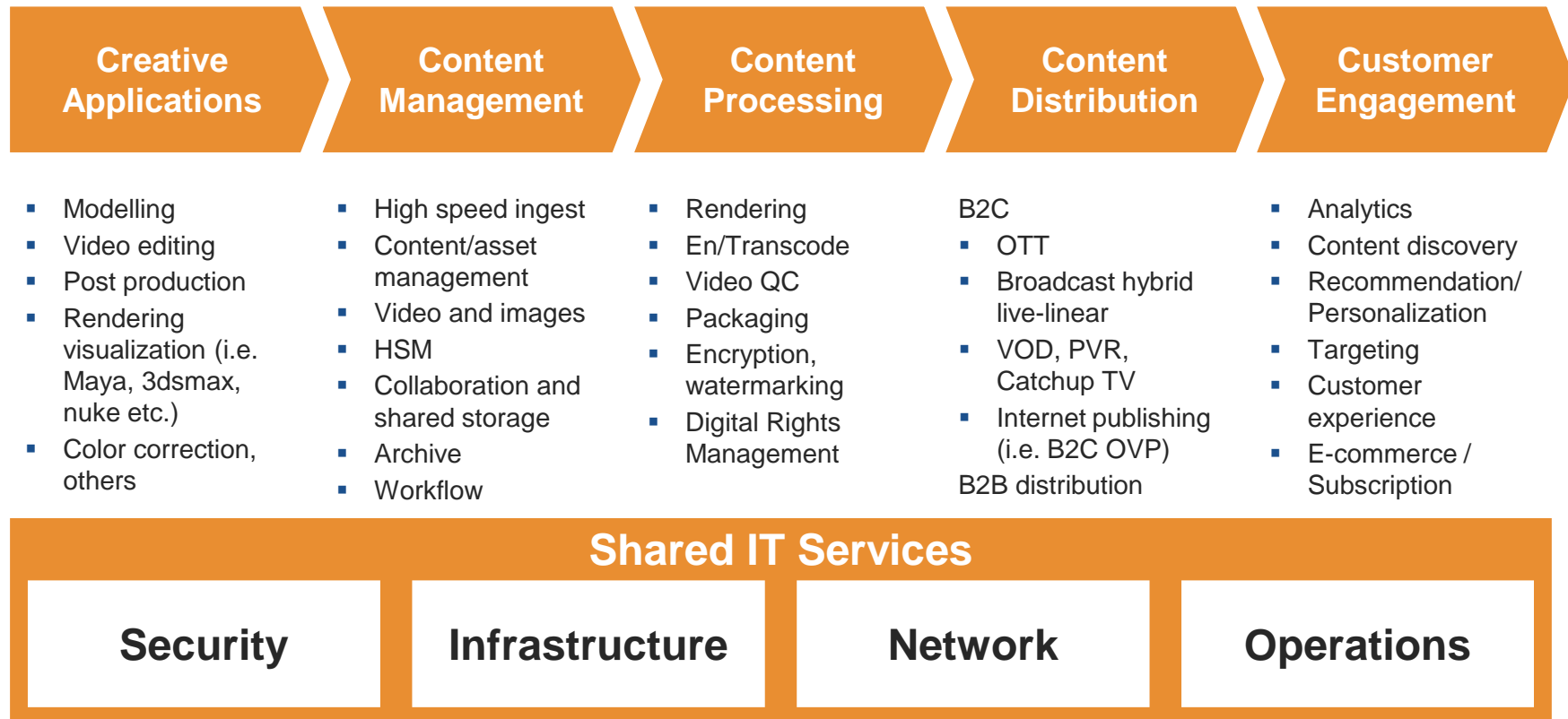
Amazon Web Services Platform



AWS Services Stack in a Media Workflow

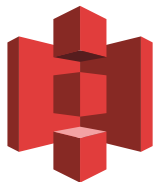


Media Production & Distribution Value Chain



Media Ingest Solutions

AWS Solutions



Amazon S3
(multipart Upload)



AWS Direct
Connect



AWS Storage
Gateway Service



AWS Import/
Export

Partner Solutions



Media Storage Services

Amazon EBS

Block storage for use with Amazon EC2



Amazon S3

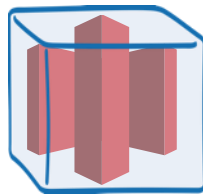
Internet scale storage via API



Images
Videos
Files
Binaries
Snapshots

Amazon Glacier

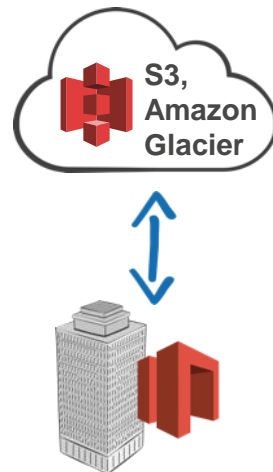
Storage for **archiving** and **backup**



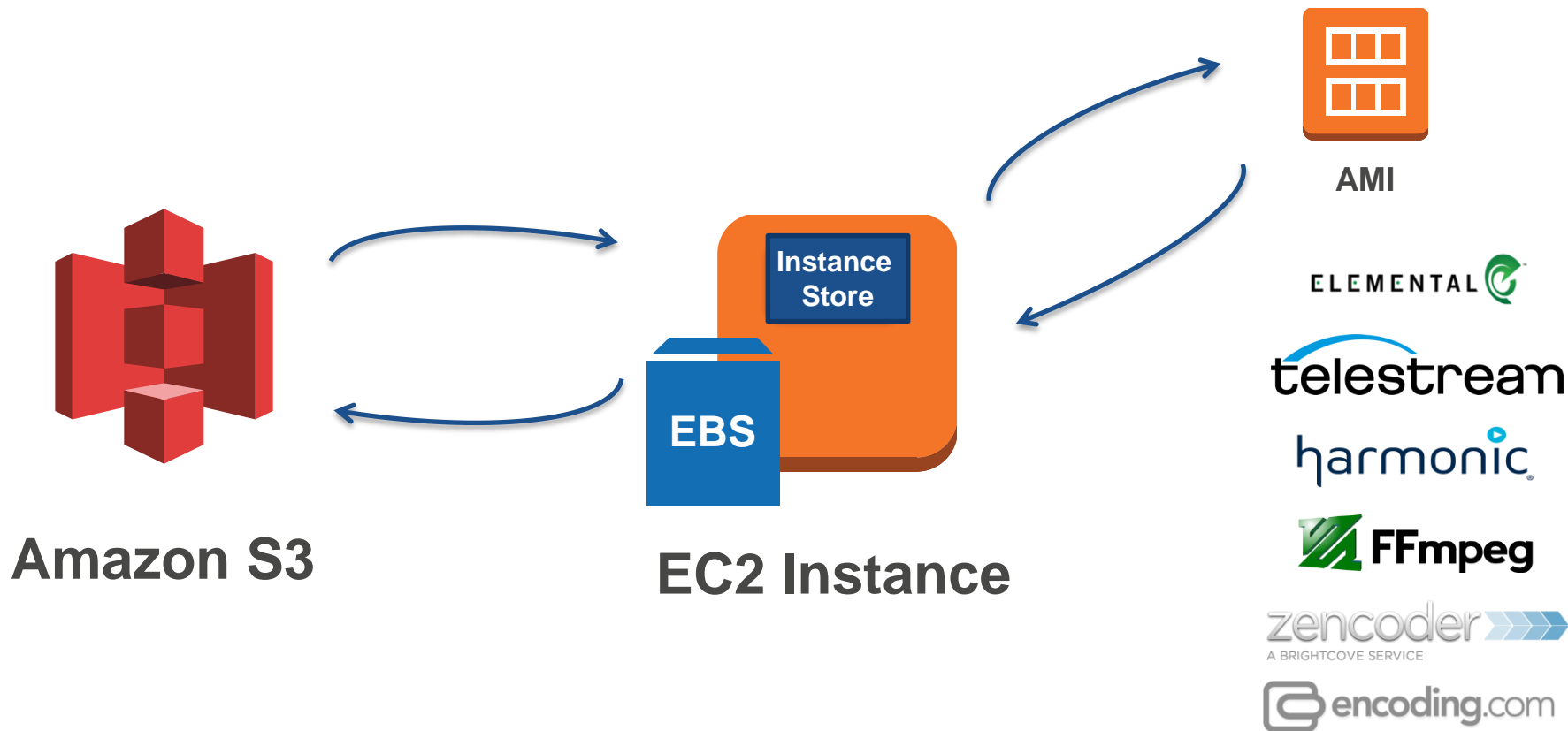
Images
Videos
Files
Binaries
Snapshots

AWS Storage Gateway

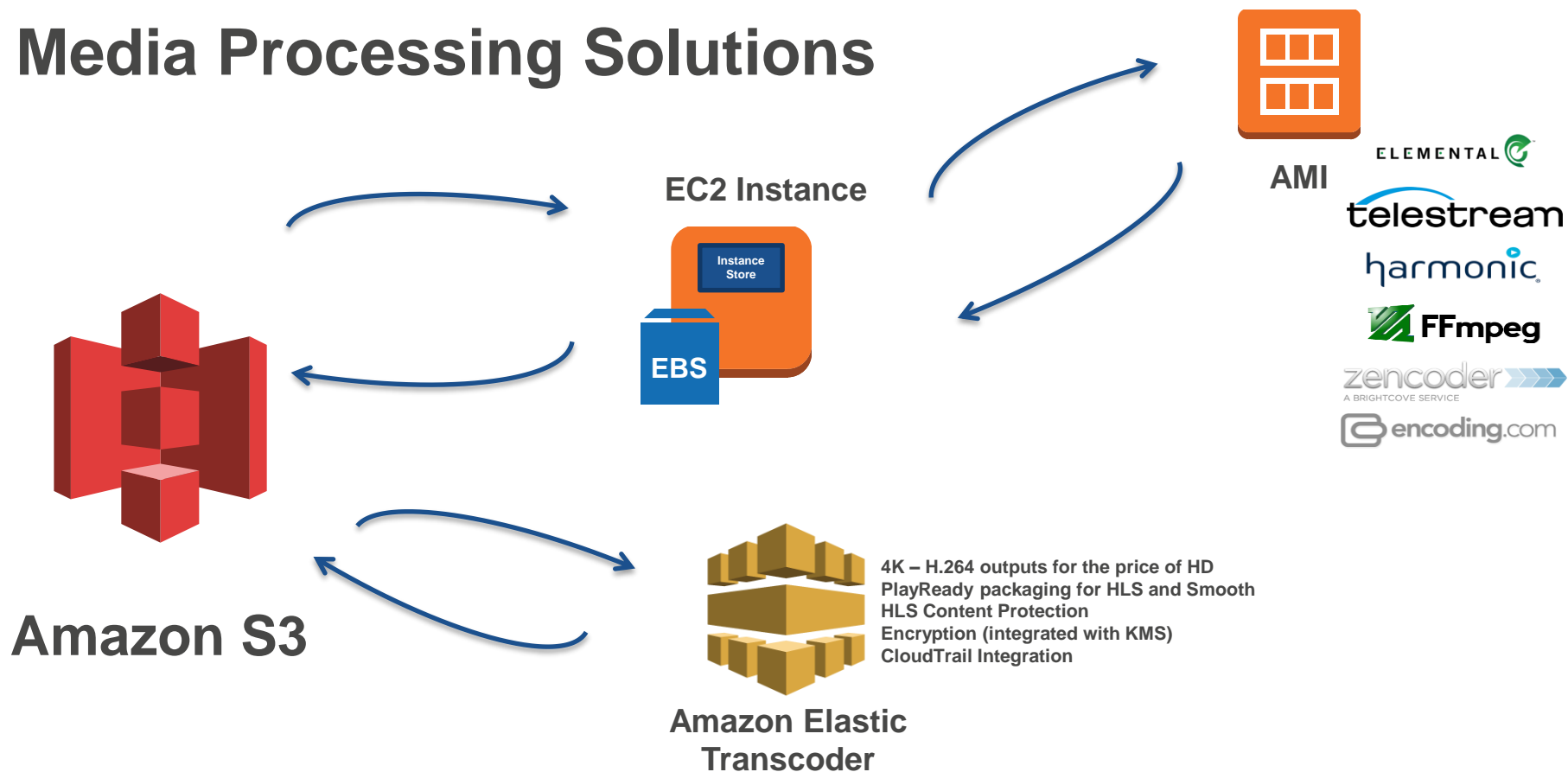
Integrates on-premises IT and AWS storage



Media Processing Solutions



Media Processing Solutions



Media Operations – Other considerations



Amazon SNS
(Simple Notification Service)

Push notifications to:
Apple, Google, FireOS,
Windows & Android
with Baidu Cloud Push

Internet Connected
Devices & Distributed
Services



Amazon SQS
(Simple Queuing Service)

Fast, reliable, durable
and fully managed
Queue

Integrate with your apps
through an API
endpoint



Amazon SWF
(Simple Workflow)

Fully managed **state
tracker task
coordinator**

Simple API calls that
can be called from your
code in any
programming language
and initiate tasks in or
outside the cloud



AWS Lambda
(Cloud Functions)

Fully managed
function service

Run your code based
on a notification

Pay for only running a
code snippet without
any server or
infrastructure builds



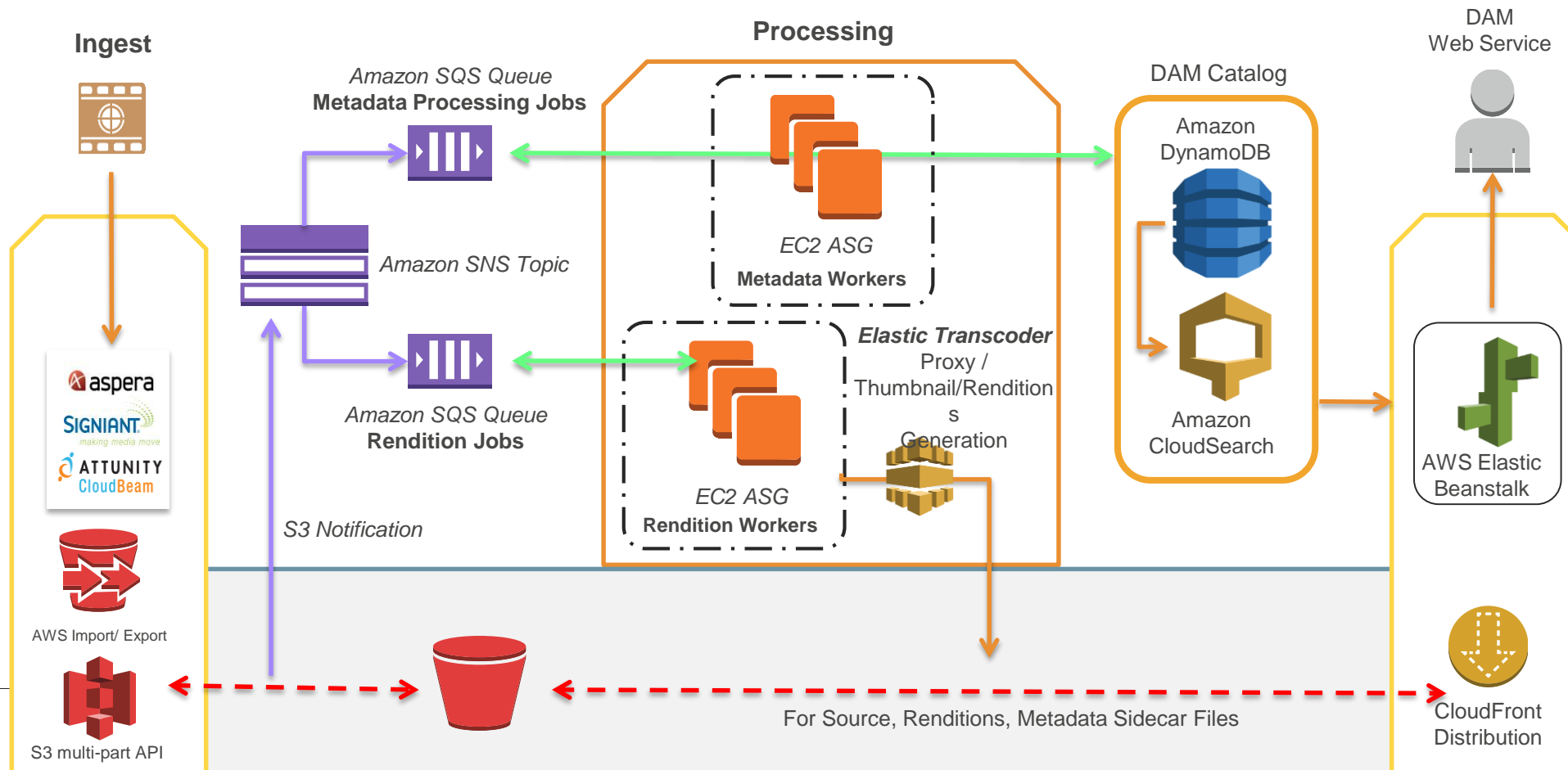
Key Management Service

Fully managed **service
to create and control
keys**

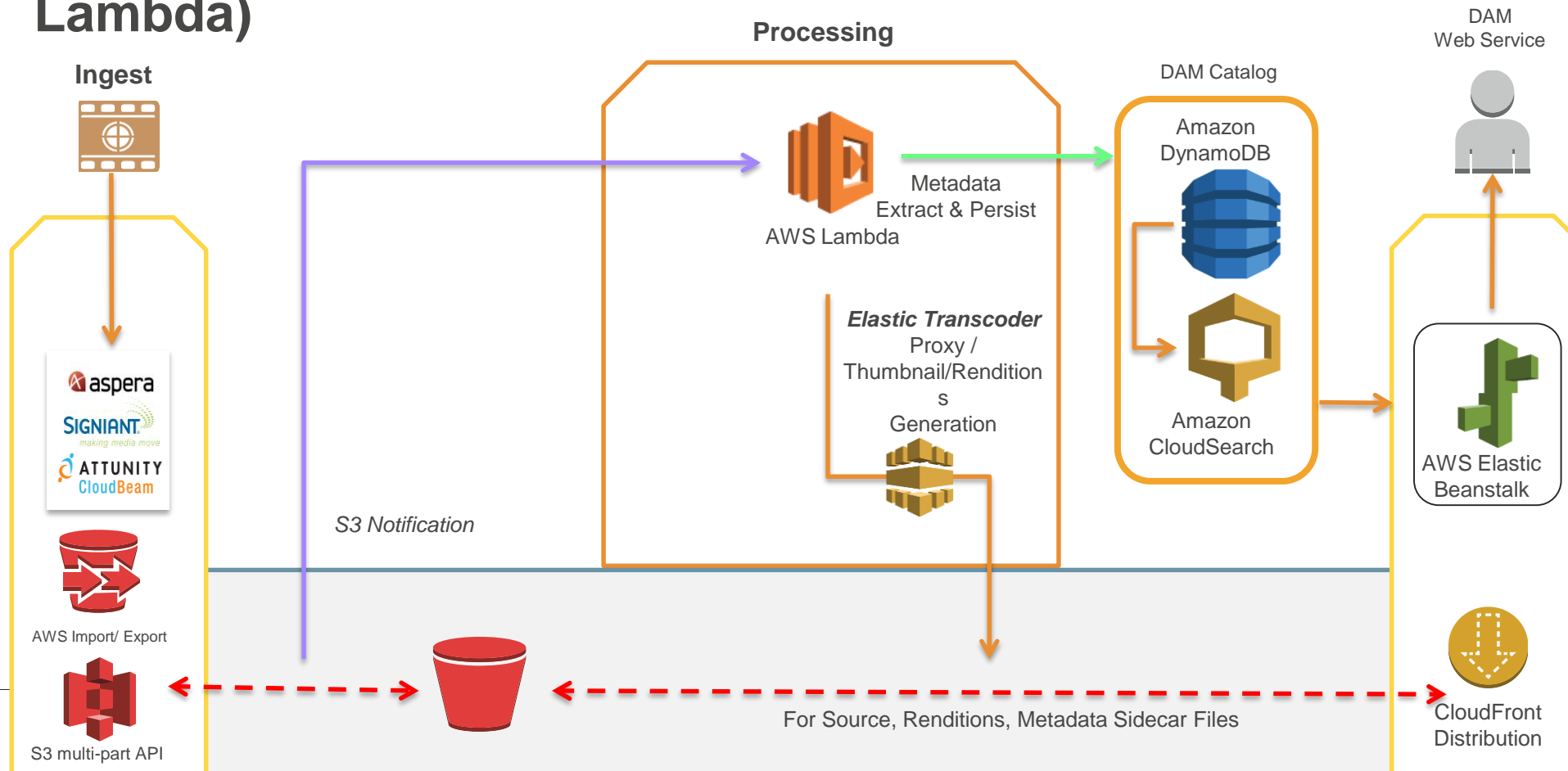
Integration with EBS,
S3, ETS, Redshift etc.

Low cost, automated
way to manage and
integrate encryption
keys within applications

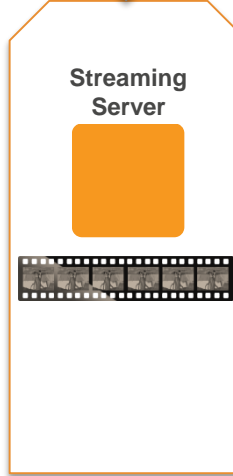
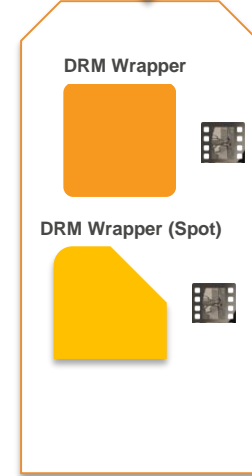
Reference Architecture – Digital Asset Management on AWS



Reference Architecture – Digital Asset Management (Using Lambda)



Reference Automated Media Workflow



Reference Architecture – Content Processing Pipeline (Using Lambda)

Ingest



AWS Import/ Export



S3 multi-part API

Trigger an AWS
Lambda Function to
Start a transcoding job



S3 Notification



Amazon Elastic
Transcoder



AWS Lambda
function to
generate a signed
URL to share the
file



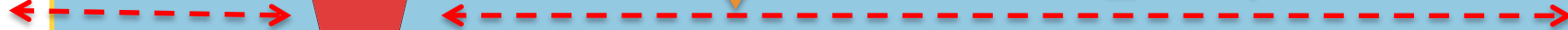
S3 Notification



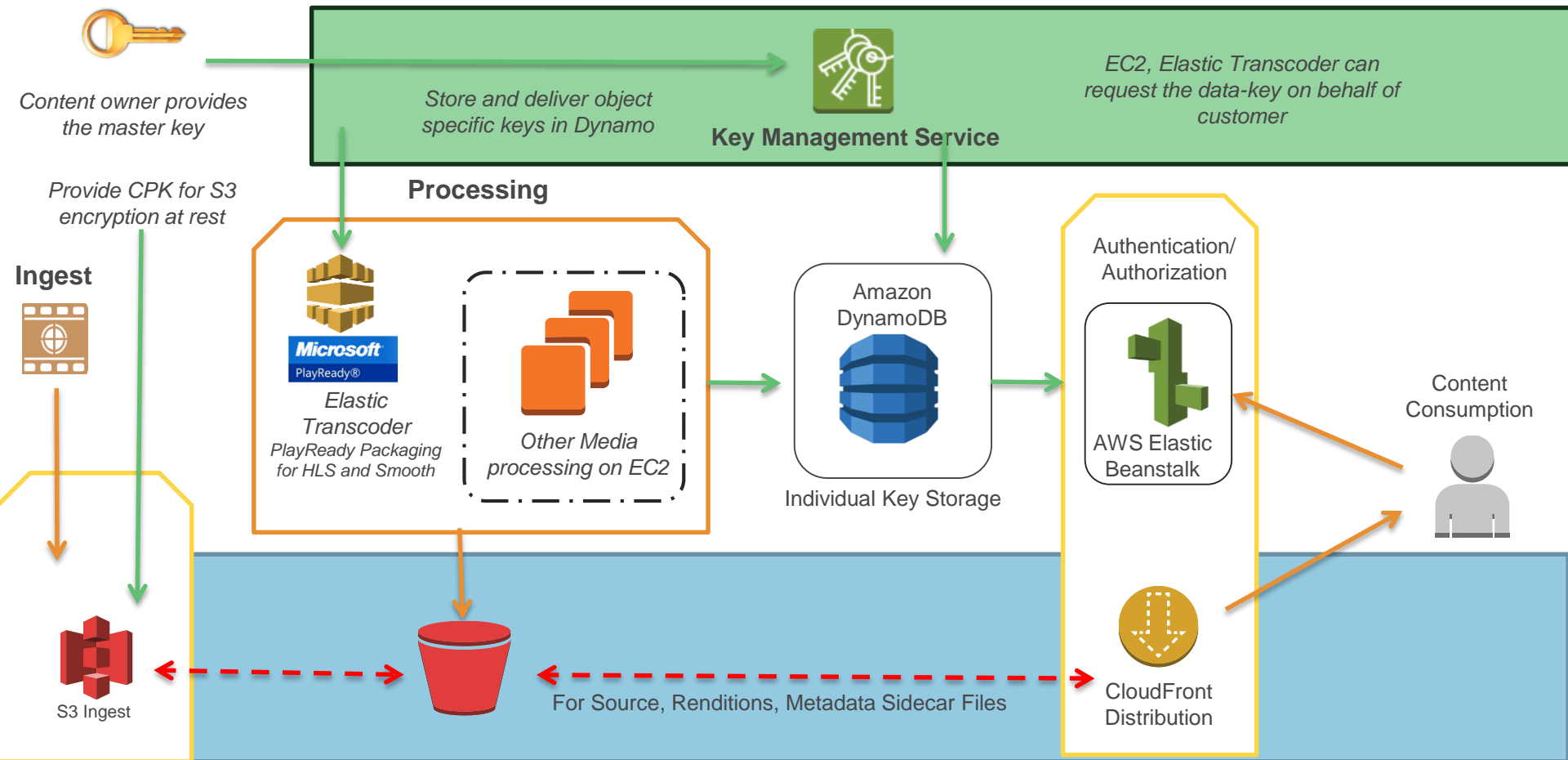
Update CMS or
Metadata



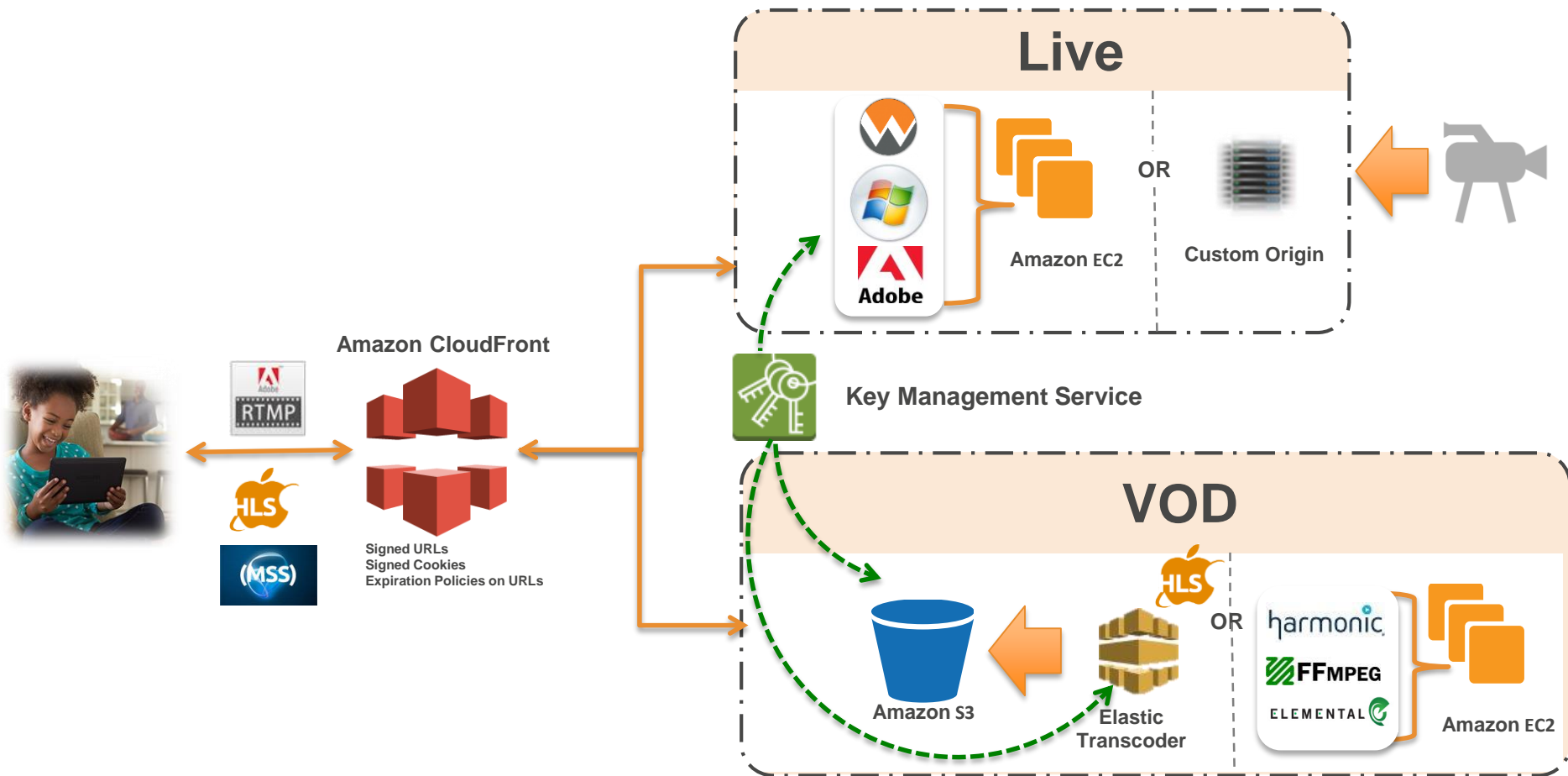
S3 as backend storage for Content Files accessible to
other processing tasks



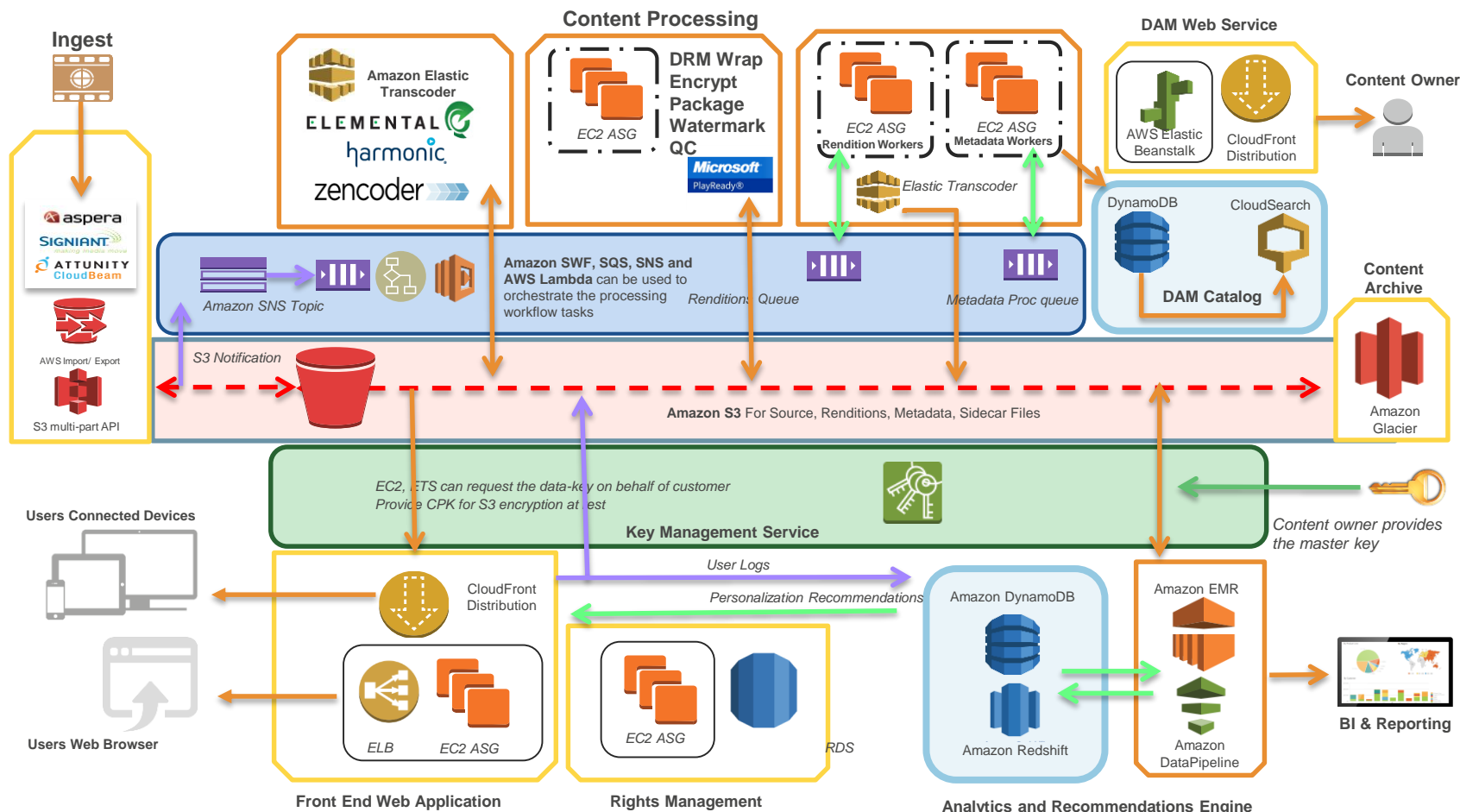
Reference Architecture – Key Management, Content Encryption & Security



Reference Architecture – Content Streaming



Reference Architecture – An OTT Workflow on AWS



Q&A