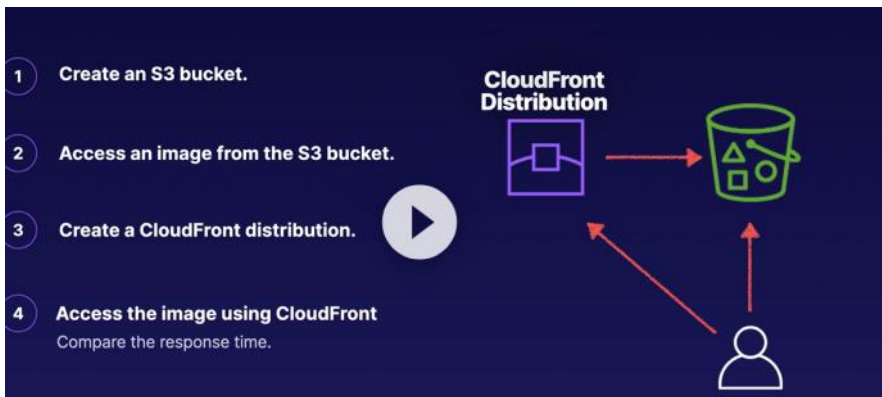


demo

1)



S3  
↳ create bucket → pub access  
need bucket policy

what is bucket policy  
\* all get access

Create a Cloudfront distribution

↳ S3

\* possible to have signed url to view some specific content, Example some page is viewable only for paid members

\* TTL → default 86400 seconds

\* We can configure how our request objects should be

→ origin request policy

\* we can configure different http header to be set or diff cookies to set

\* Web application firewall possible

\* Cloudfront has option for http 2/3

\* Geographic restriction possible

\* ... ..

✓ Geographic Restriction possible

\* we can link cloud front to a function which will allow custom action for each request before a redirect

\* create invalidation to remove a cache object  
↳ every time this is done you will be charged a fee.

### CloudFront Exam Tips

- 1 Content Delivery Network**  
CloudFront can speed up the delivery of your static content to viewers around the world.
- 2 Origin**  
The origin is the location where your original content is stored, e.g. an S3 bucket.
- 3 Edge Location**  
Users access your content from a local edge location instead of directly accessing it from the origin, which may not be geographically close to them.

Configure cloudfront with Origin Access

Policy

- 1 Create an S3 Bucket**  
Enable public access and upload an image to the bucket.
- 2 Create a CloudFront Distribution**  
Create an **Origin Access Identity**.
- 3 When the Distribution is Ready**  
Check we can access the image using CloudFront.
- 4 Restrict Access**  
Remove **public read access** from our bucket.  
We should only be able to access the image **using the CloudFront URL**.








give public access through acl

\* choose OAI (bucket access only through cloud front)

### What Are CloudFront AllowedMethods?

#### Supported HTTP Methods

#### Which Should I Choose?

	HTTP METHOD	DEFINITION	EXAMPLE
	GET	Read data; often the default method used by HTTP clients.	Read a web page.
	HEAD	Inspect resource headers; similar to GET, except without the response body.	Read a web page's header.
	PUT	Send data to create a new resource, or replace an existing resource. Idempotent.	Update data or change the status of a resource.
	PATCH	Partially modify a resource.	Modify the contents of a shopping cart.
	POST	Insert data; used to create or update a resource. Not idempotent.	Comment on a blog post.
	DELETE	Delete data.	Remove your email address from a mailing list.
	OPTIONS	Used to find out what other HTTP methods are supported by the given URL.	Receive a list of supported HTTP methods.

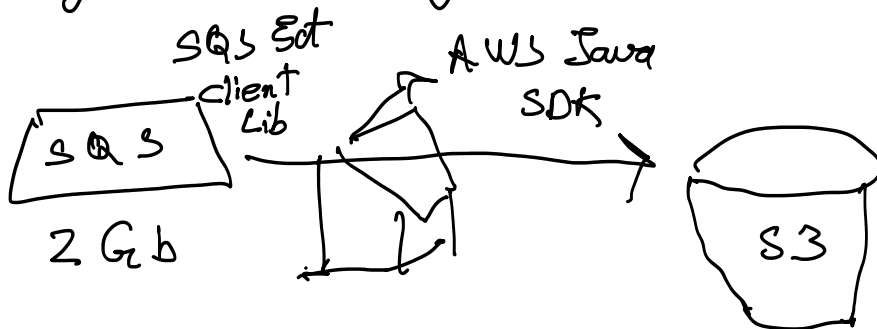
## Simple Queue Service

\* Queue visibility

\* Queue delay

---

Large SQS message (use S3)



Can't use AWS cli, SQS console

---

Working with Athena

- 1) config trail in cloud trail
- 2) send logs to s3
- 3) use Athena to query

config cloud trail

\* 10 kms

\* need to create bucket

need to create DB first

\* there is a query lang we need to know.  
↳ this is sql

\* create table what are the attributes  
are defined.

```
CREATE EXTERNAL TABLE cloudtrail_logs (
  eventversion STRING,
  useridentity STRUCT<
    type:STRING,
    principalid:STRING,
    arn:STRING,
    accountid:STRING,
    invokedby:STRING,
    accesskeyid:STRING,
    username:STRING,
  sessioncontext:STRUCT<
    attributes:STRUCT<
      mfaauthenticated:STRING,
      creationdate:STRING>,
    sessionissuer:STRUCT<
      type:STRING,
      principalid:STRING,
      arn:STRING,
      accountid:STRING,
      username:STRING>>>,
  eventtime STRING,
  eventsource STRING,
  eventname STRING,
  awsregion STRING,
  sourceipaddress STRING,
  useragent STRING,
  errorcode STRING,
  errormessage STRING,
  requestparameters STRING,
  responseelements STRING,
  additionalEventData STRING,
  requestid STRING,
  eventid STRING,
  resources ARRAY<STRUCT<
    ARN:STRING,
    accountId:STRING,
    type:STRING>>,
  eventtype STRING,
  apiversion STRING,
  readonly STRING,
  recipientaccountid STRING,
  serviceeventdetails STRING,
  sharedeventid STRING,
  vpcendpointid STRING
)
ROW FORMAT SERDE 'com.amazon.emr.hive.serde.CloudTrailSerde'
STORED AS INPUTFORMAT 'com.amazon.emr.cloudtrail.CloudTrailInputFormat'
OUTPUTFORMAT 'org.apache.hadoop.hive.q1.io.HiveIgnoreKeyTextOutputFormat'
LOCATION 's3://YOUR_BUCKET_NAME/AWSLogs/YOUR_ACCOUNT_NUMBER/';
```

Athena query results get stored  
in another s3 bucket

\* Run queries on  
that table

```
SELECT
  useridentity.arn,
  eventname,
  sourceipaddress,
  eventtime
FROM cloudtrail_logs
LIMIT 100;
```

Create cloud trail

Creates  
entries in db

Create  
s3 for  
Athena result

Do query to  
create db in s3

to create  
table

Trigger Aws lambda from Sqs

Saturday, 31 August 2024

10:07 PM

# Hands on

04 August 2024 23:07

## [AWS Step Function Project Customer Contact Workflow](#)

