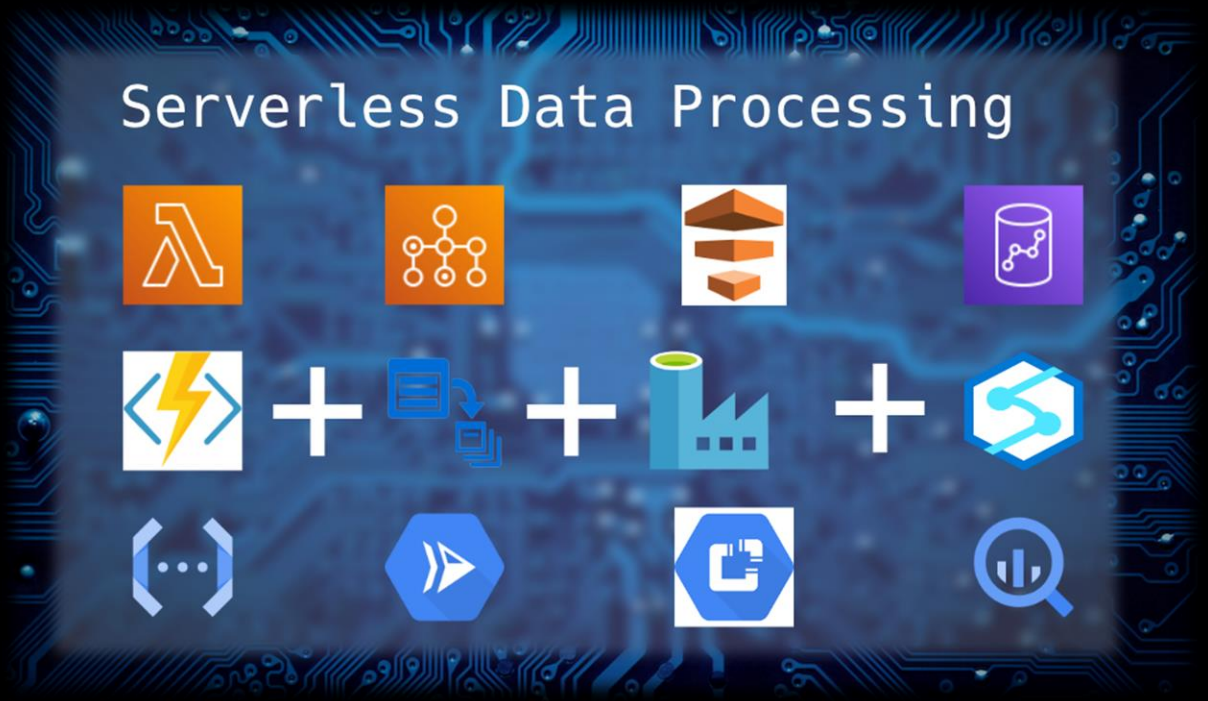

aws

Serverless Image Processing

- Create a serverless image processing application that automatically resize and optimize images



Overview

This solution creates a serverless architecture to initiate cost-effective image processing in the AWS Cloud. The architecture combines AWS services with sharp open-source image processing software and is optimized for dynamic image manipulation. You can use this solution to help you maintain high-quality images on your websites and mobile applications to drive user engagement.

- Benefits

Dynamic content delivery
Deliver dynamic images at run-time based on your customer’s device.

Content moderation
Detect and blur inappropriate images using Amazon Recognition.

Smart cropping
Crop images using the facial recognition capabilities of Amazon Rekognition.

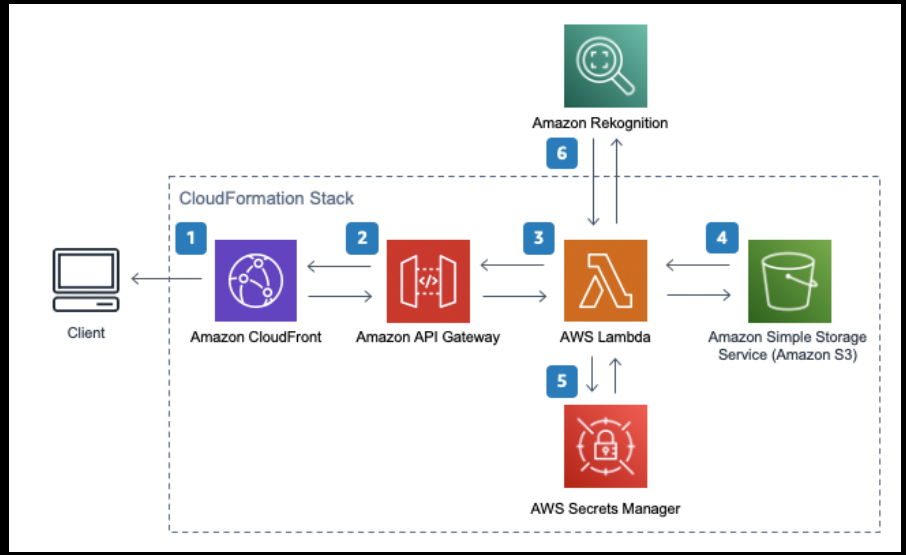
Interactive web interface
Deploy a simple web interface where you can to interact directly with your image handler API endpoint using image files that already exist in your account.

Low-cost storage
Save on storage costs via automated version control, eliminating multiple versions of images.

Technical details

The diagram below presents the serverless architecture you can deploy in minutes using the solution's implementation guide and accompanying AWS CloudFormation template.

- Step :
  The AWS CloudFormation template deploys an Amazon CloudFront distribution that provides a caching layer to reduce the cost of image processing and the latency of subsequent image delivery. The CloudFront domain name provides cached access to the image handler API.



➢Upload to an Amazon S3 bucket

Step 1: Create an Amazon S3 Bucket

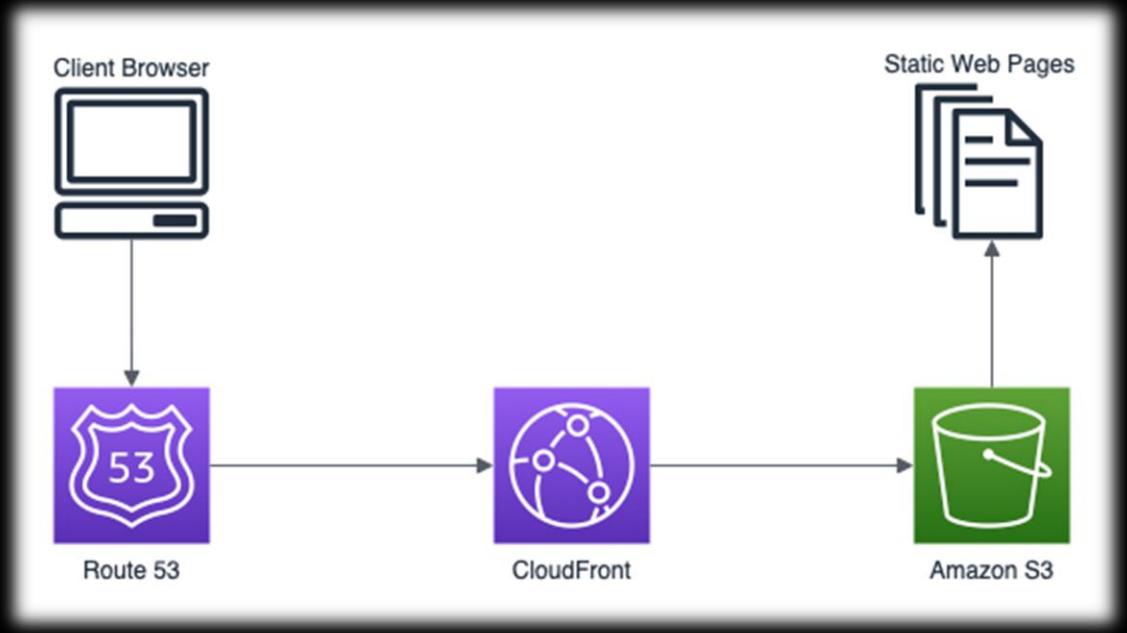
Step 2: Upload a File to Your Amazon S3 Bucket

Step 3: Retrieve a File from Your Amazon S3 Bucket

Step 4: Delete a File From Your Amazon S3 Bucket

Deploy a Static Website on AWS

- In this project, we will learn how to create a Static Website and deploy it using AWS services. A static website is a site that consists of HTML, CSS, and JavaScript files, and it doesn't require server – side processing of a database.



- Deploy static websites to Amazon S3

  Amazon simple storage service (S3) primary focus is general object storage in the cloud, similar to Google Drive or Dropbox. In this case, S3 is for software-oriented applications which you can use to store anything from images, hosting static websites, source code, spreadsheets, and so on.

- **GitHub**
  For this project, the source code is in this repo which is my portfolio and accessible via this URL.

- Prerequisites

The following are required to complete this tutorial:

Create an AWS account. Sign-up is free

- Benefits of S3

The benefits of choosing S3 over other services are:
Durable: The services provided allow your app to scale without fluctuating downtime.
Highly available: It is available across so many data regions worldwide.
Supports integration with AWS: S3 can be integrated with other services by AWS based on your needs. Explore the over 200 AWS services and start developing.

- Deploying a static website
  There are several ways to host your website:

  Using the S3 console
  Utilizing the representation state transfer (REST) application programming interface (API)
  Using the AWS software development kit (SDK)
  Using the AWS command line interface (CLI)
  In this project, we will use the S3 console to deploy and host a website.