

# Building a Complete Rekognition Front End

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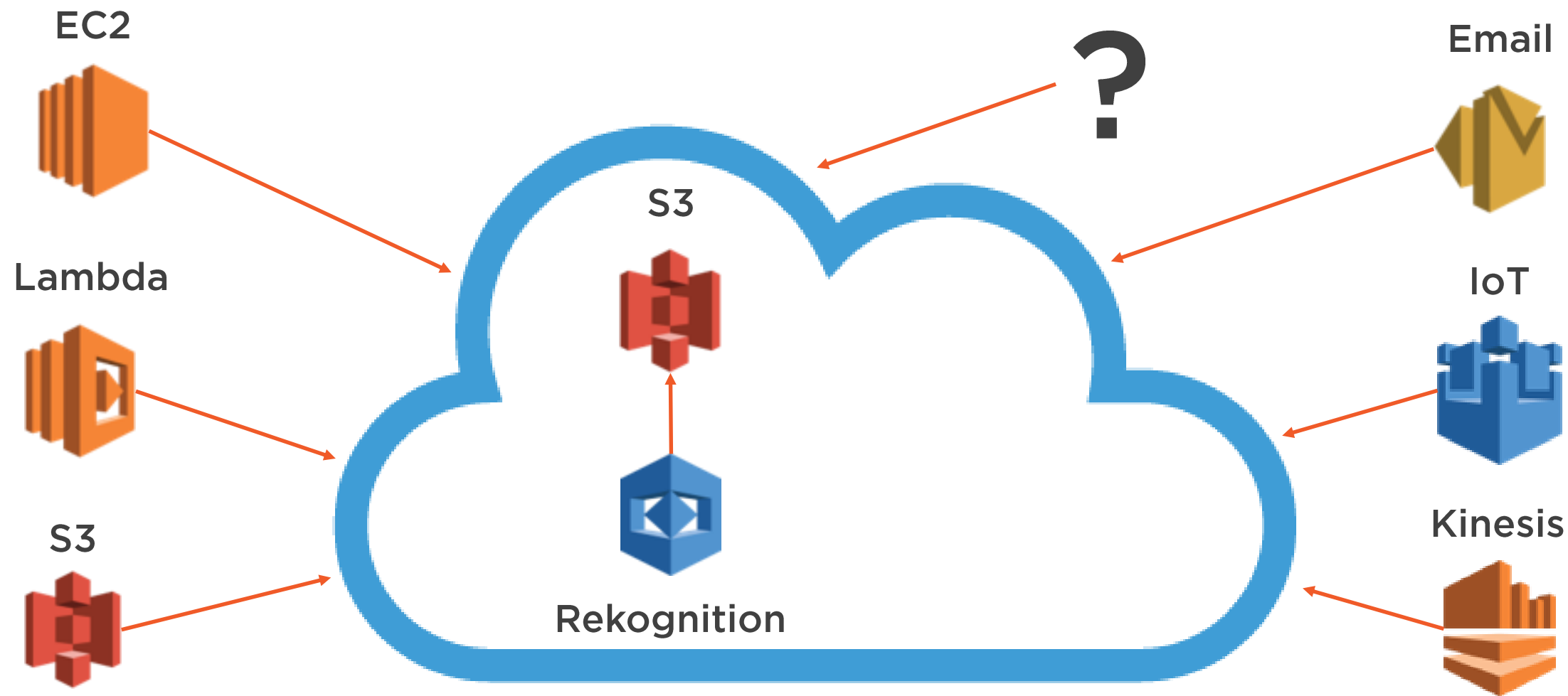
**Alan Jones**

SOFTWARE DEVELOPER

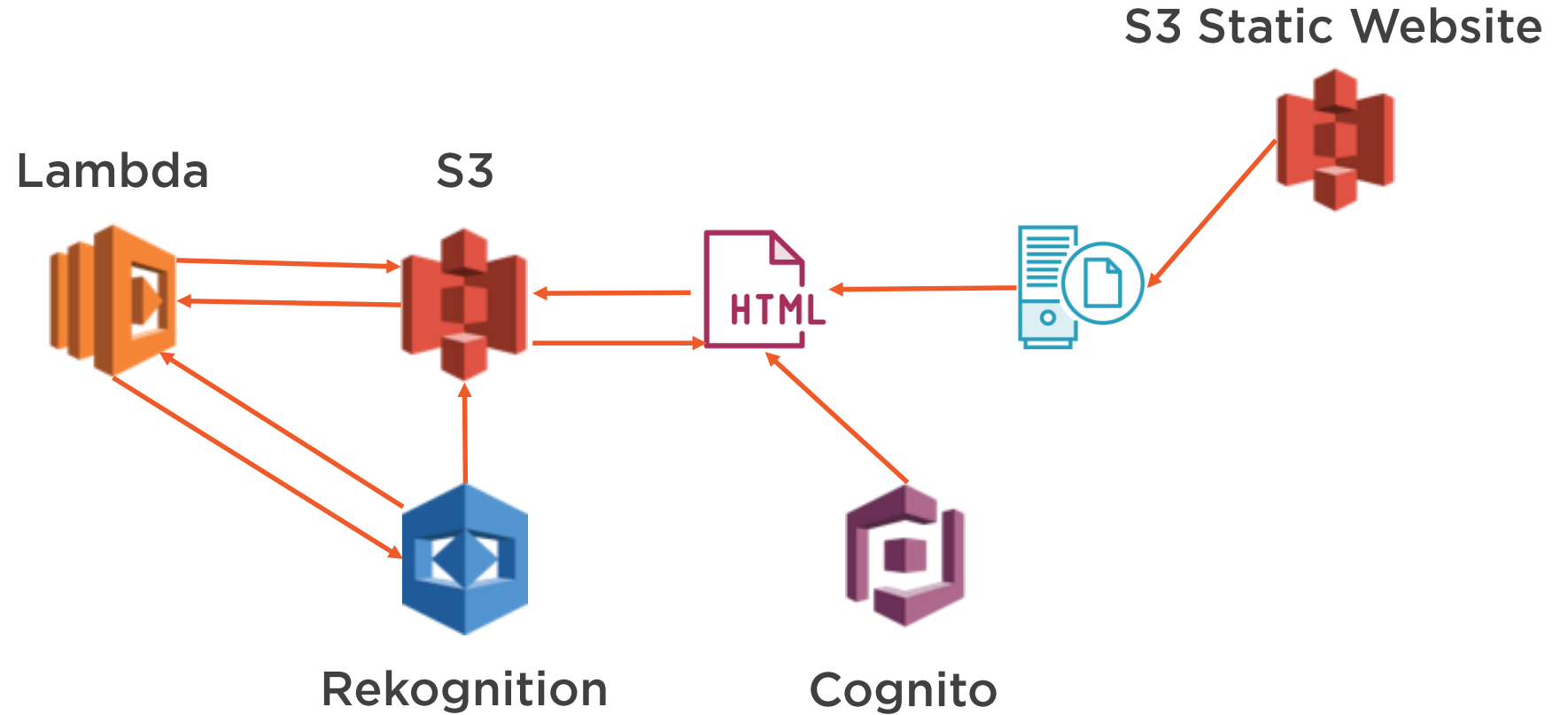
[www.ajones2k.com](http://www.ajones2k.com)



# AWS Application Approaches



# Application Structure



# New Services and Features



Lambda microservice will call Rekognition



AWS SDK for JavaScript



Cognito federated credentials manager and user pools



S3 as a static web site host



# AWS Lambda



**Function as a service**

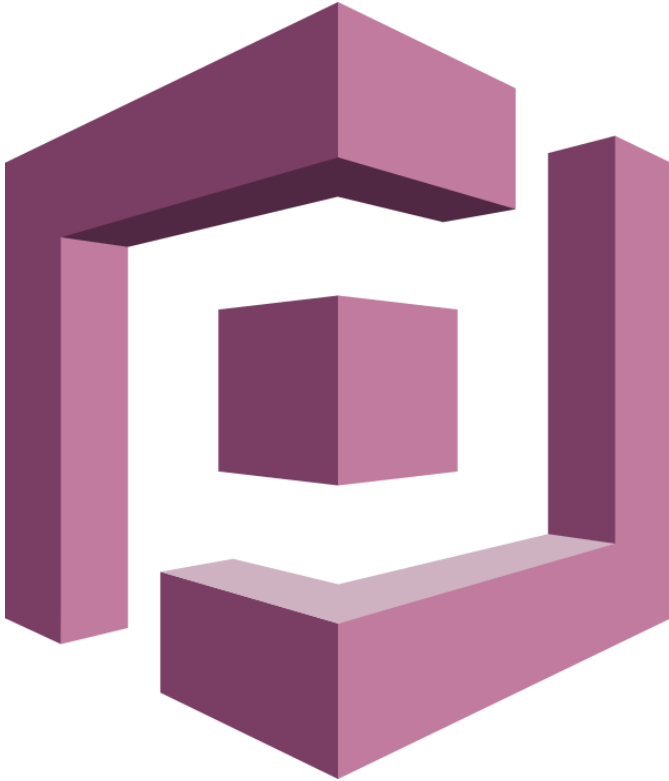
**Triggered from many sources**

**Very low operating cost**

**Provides built in scalability**



# Cognito



**Allows use of federated credentials**

**Create user pools with specific access**

# AWS SDK for JavaScript



**Allows easy access from HTML**

**Supports direct access to S3 via Cognito**



# Summary



**Use Lambda and JavaScript**

**Build and test services one at a time**



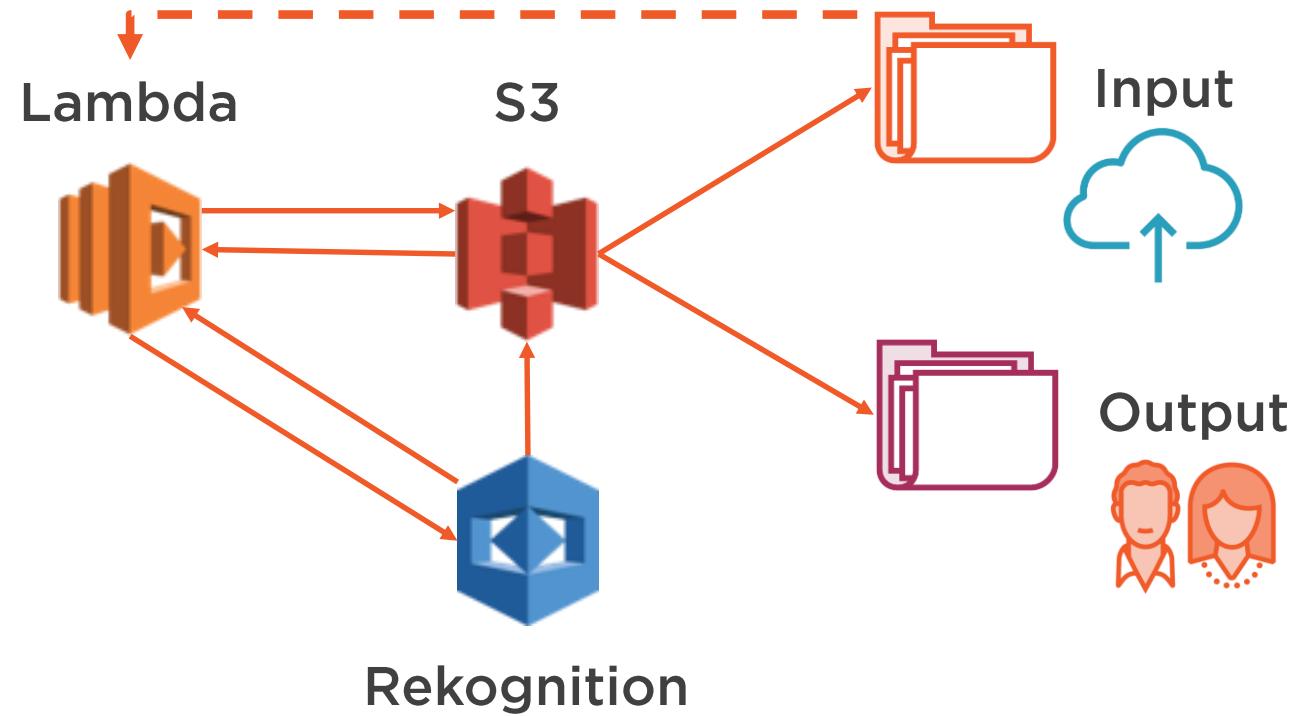


# Building the Lambda Service

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# Setting Up S3 and Lambda



# Summary



Create a Lambda function using a blueprint

Create Python deployment package with image library

Modify the role to allow Rekognition and S3 access

Enabled the Lambda S3 trigger

Troubleshoot our problem with the CloudWatch service

Confirmed the output of our service



# HTML and JavaScript Front End

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# HTML and JavaScript

**Very easy to integrate AWS JavaScript SDK**

**Many development tools available**

**Debugging is aided by the development features in most browsers**

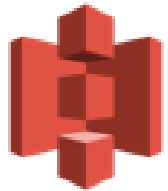
**JavaScript SDK is very similar in concept and coding to Boto3**



# Development Steps



Create an identity pool and apply inline policy



Setup Cross-Origin Resource Sharing (CORS) on S3 bucket



Create and test the HTML code and scripting



# Summary



Setup of the identity pool and S3 CORS configuration is simple

SDK functions can be called from a browser with a few lines of code



# S3 Static Web Site

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# S3 Static Web Site

**Easy to setup and low cost**

**Only works for static content**

**Can be used in conjunction with Route53  
for custom URLs**



# Summary



Create Lambda Service

Cognito and S3 CORS

HTML and JavaScript

S3 Static Web Site Hosting

