Text to Speech Converter

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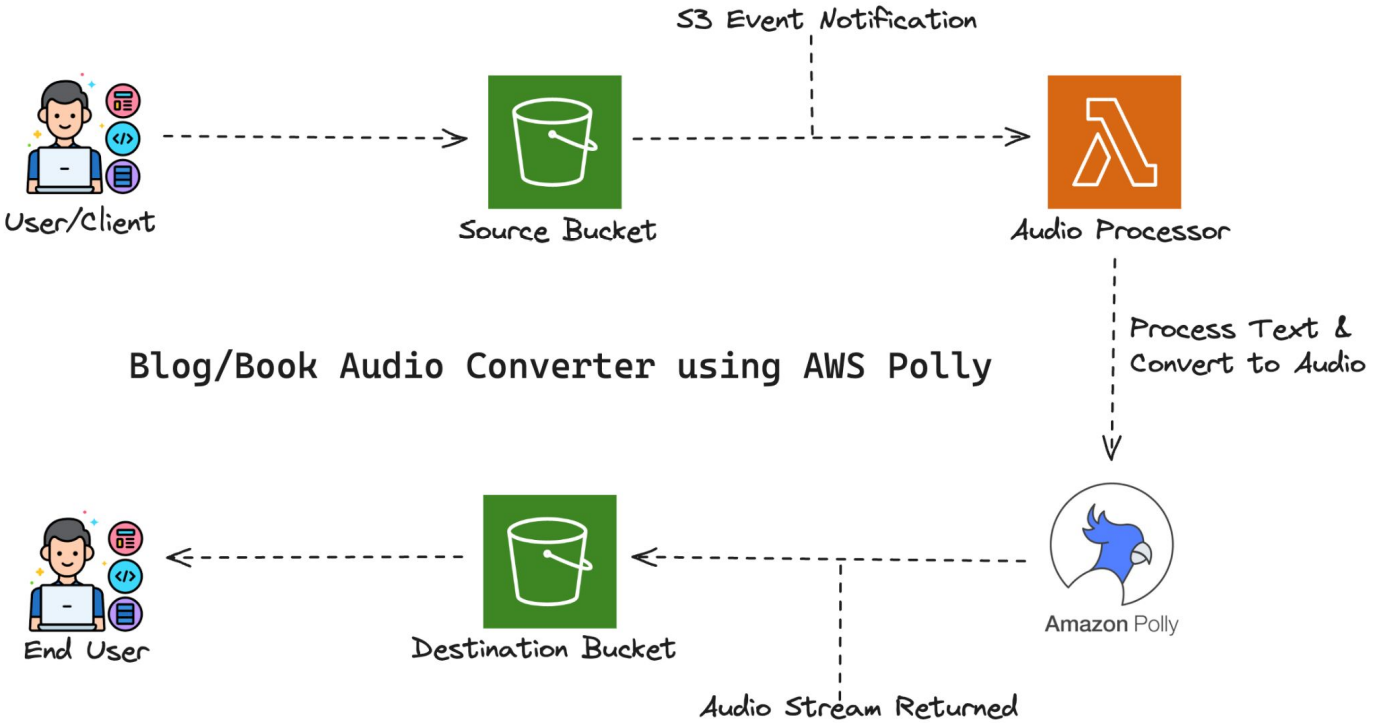
PROJECT OVERVIEW

The **Text-to-Speech Converter** leverages **AWS Polly** for speech synthesis and **AWS Lambda** for serverless computation. The system is built with the following objectives in mind:

Content Accessibility	Providing audio versions of written content for visually impaired users.
Learning Enhancement	Enabling users to listen to educational materials, making learning more dynamic.
Increased Engagement	Offering an additional medium for consuming written content.
Convenience	Allowing users to enjoy audio content while multitasking during commutes or workouts.

Architecture



ARCHITECTURE

AWS S3 Buckets

Source Bucket: Stores the input text files.

Destination Bucket: Saves the generated audio files.

AWS Lambda

Acts as the processing engine. It retrieves the text file, converts it to speech using AWS Polly, and stores the audio in the destination bucket.

AWS Polly

Converts text into speech with customizable voice and language options.

OPTIONAL ENHANCEMENTS

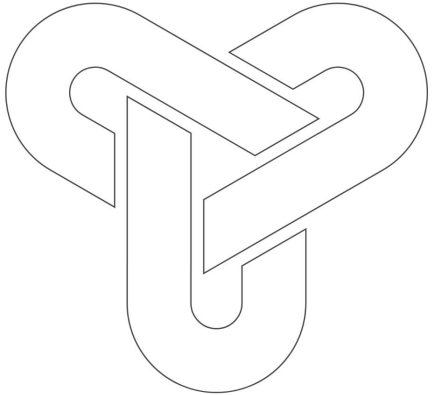
AWS API Gateway: Enables external interaction with the Lambda function.

S3 Encryption: Secures stored audio files.

Goals Achieved

Secure Access

Uses robust IAM policies to manage permissions



On-Demand Conversion

Quickly convert text into audio

Scalable Architecture

Handles varying workloads without manual intervention

CONCLUSION