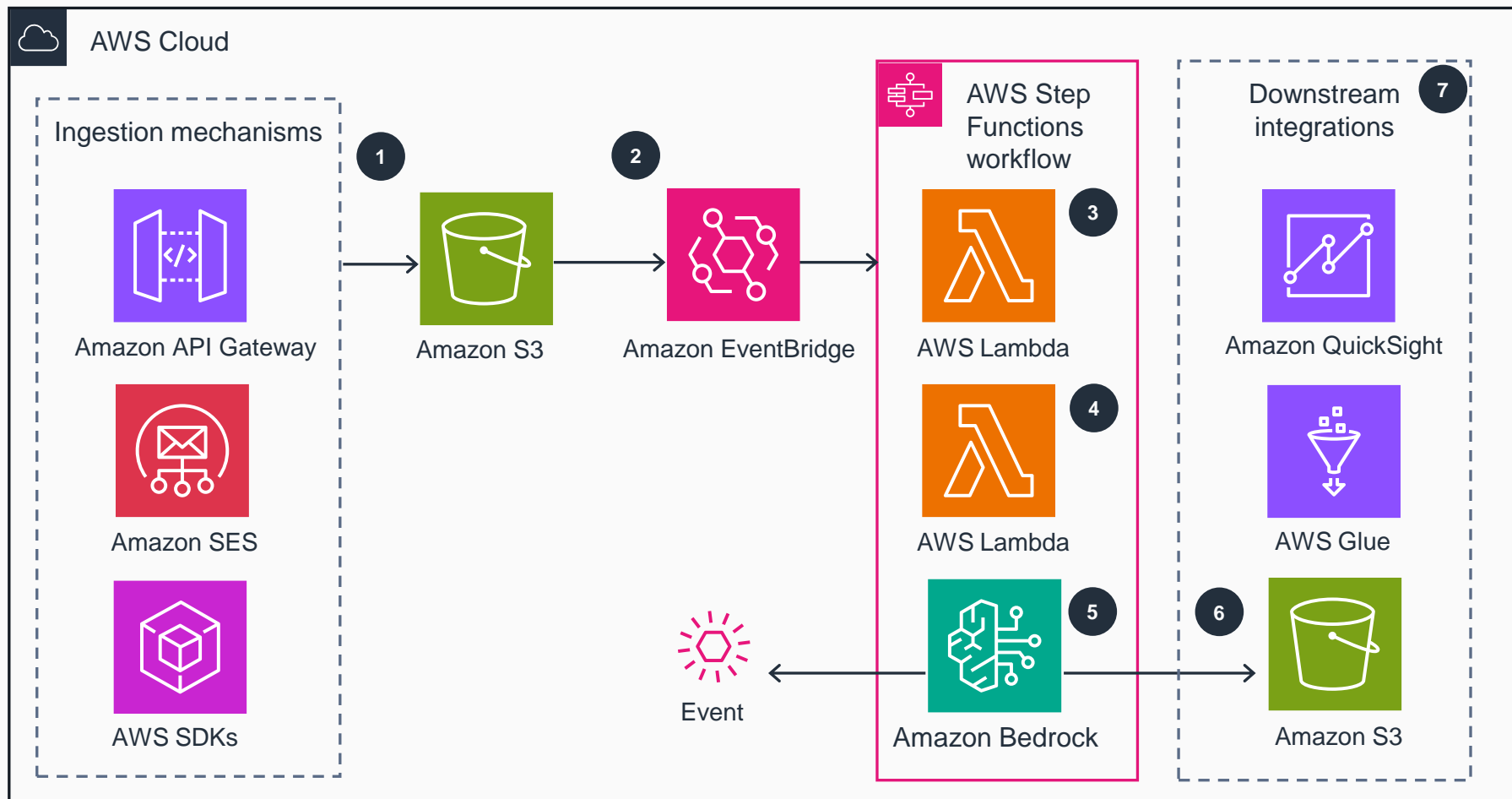


Guidance for Utility Bill Processing on AWS

This architectural diagram illustrates a scalable approach to processing utility invoices into machine-readable data from binary image sources. This framework can be used to automate the extraction process, apply custom data transformations, and generate insights for sustainability reporting purposes.



- 1 Any ingestion mechanism can be used to move invoice documents into **Amazon Simple Storage Service (Amazon S3)** for processing, such as **Amazon API Gateway**, **Amazon Simple Email Service (Amazon SES)**, or the **AWS SDKs**.
- 2 Invoice documents arrive in an **Amazon S3** bucket, trigger event notifications in **Amazon EventBridge**, and start a processing workflow in **AWS Step Functions**.
- 3 **AWS Lambda** converts the PDF document into images and saves them to **Amazon S3**.
- 4 The images are combined with a text-based prompt. The full prompt is saved to **Amazon S3**.
- 5 **Amazon Bedrock** is called directly from **Step Functions** using an optimized integration. The prompt instructs the foundation model to interpret the image and generate a standard structured JSON output.
- 6 Standardized utility invoice data is stored in an output **Amazon S3** bucket to integrate with downstream analytics capabilities such as **Amazon QuickSight** or with Data Lakes on AWS.
- 7 An event is published through **EventBridge**. This event can be used to notify end users or other systems that processing has completed.

