

AWS Lambda is a serverless compute service that lets you run code in response to events without provisioning or managing servers. [\(Source\)](#)

Key Features:

- Event-Driven Execution: Lambda functions can be triggered by various AWS services, such as S3 uploads or API Gateway requests.
- Automatic Scaling: Lambda automatically scales your application by running code in response to each trigger.
- Cost Efficiency: You pay only for the compute time you consume—there's no charge when your code isn't running. [\(Source\)](#)
- Multiple Language Support: Supports Node.js, Python, Java, Go, .NET, Ruby, and custom runtimes. [\(Source\)](#)

Use Cases in Project:

- Triggering functions upon file uploads to Box. [\(Source\)](#)
- Parsing PDFs to extract Bates stamps. [\(Source\)](#)
- Renaming files and moving them to appropriate folders.
- Sending email notifications in case of errors.

Security and Performance:

- Lambda functions run in isolated environments using Firecracker microVMs, enhancing security and performance. [\(Source\)](#)