

DevOps Kitchen Workshop

#week_eight - Lambda

Manage file Transfer between S3 Buckets using Lambda

FrogTech company has the challenge of automating a manual process, They are using S3 as a public storage for external/internal parties authenticating using IAM credentials.

There are two main S3 buckets 1. `frogtech-us-external` and 2. `frogtech-us-internal`, The Challenge lies in the manual actions that operators do daily in order to move files from one S3 to another.

You're requested to automate this process using Lambda function, utilizing the native SDK of AWS (*i.e. Python boto3 SDK*.) FrogTech engineers have no idea about lambda. Therefore you as an expert, should provide them with a document containing the **basics** of lambda, besides explaining:

1. Function event.
2. Function context.
3. Function environment variables.
4. layers.
5. Differences between Synchronous and Asynchronous.

as well as provide a diagram explaining the entire process of the created resources; Use IaC Terraform to build all resources and consider the below requirements specifications.

1. Resources must be created at the us-east-1 region.
2. Resources must have tags as below:
 - a. Key: "Environment", Value: "terraformChamps"
 - b. Key: "Owner", Value: "<Your_first_name>"
3. Preferd to use variables.

References:

1. [📖 What is AWS Lambda? - AWS Lambda](#)
2. [💡 \[AWS\] Lambda - S3 Trigger + Terraform Project 10](#)
3. [💡 \[AWS\] Lambda Concepts Essentials](#)