Build an API Gateway and integrate it to a Lambda function using Terraform

Level: **Intermediate**

AWS Lambda | Amazon Web Services | Terraform | Amazon API Gateway

Required Points	10
Lab Duration	00:45:00
Average Start time	Less than a minute

Start Lab →

Need help?

- How to use Hands on Lab
- Troubleshooting Lab
- FAQs

Submit Feedback | Share

Lab Overview

Cloud Architect, Cloud Administrator

Compute, Serverless, Infrastructure

Lab Details

1. This lab walks you through the steps to create an integration between API Gateway and Lambda function.

Privacy - Terms

2. Duration: **45 minutes**
3. AWS Region: **US East (N. Virginia) us-east-1**

Introduction

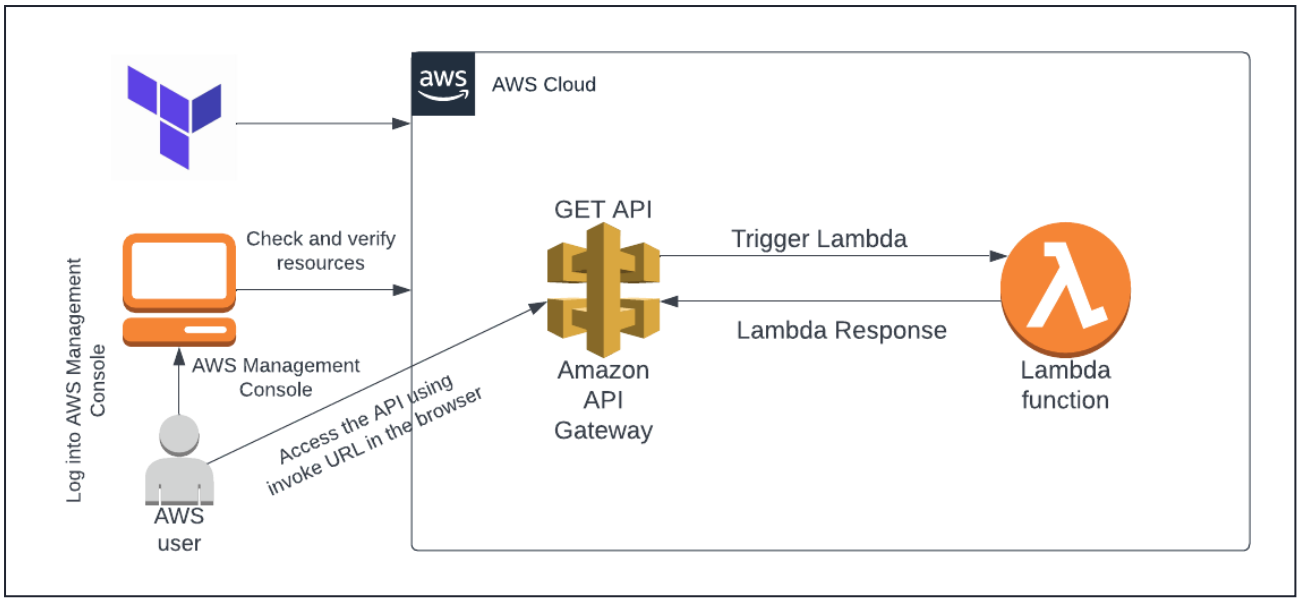
What is Terraform?

1. It is an open-source IaaC (Infrastructure as a code) software tool where you define and create resources using providers in the declarative configuration language example JSON.
2. With Terraform, You can package and reuse the code in the form of modules.
3. It supports a number of cloud infrastructure providers such as AWS, Azure, GCP, IBM Cloud, OCI, etc.
4. Terraform has four major commands:
    - terraform init
    - terraform plan
    - terraform apply
    - terraform destroy

Prerequisites

1. Install Terraform in your local machine using this official guide by Hashicorp.
2. To install Terraform using CLI, use this guide https://learn.hashicorp.com/tutorials/terraform/install-cli
3. To install Terraform by downloading, use this guide https://www.terraform.io/downloads.html
4. Download and Install Visual Studio code editor using this guide https://code.visualstudio.com/download

Architecture Diagram



Task Details

1. Sign into AWS Management Console.
2. Setup Visual Studio Code
3. Create a variable file.
4. Create an IAM role for the Lambda in the main.tf file
5. Create a lambda function in main.tf file
6. Create a REST API , its method and resource in main.tf file
7. Create a gateway integration and deploy the API in the main.tf file
8. Create an output file
9. Confirm the installation of Terraform by checking the version.
10. Apply terraform configurations
11. Check the resources in AWS Console
12. Validation of the Lab
13. Delete AWS Resources

Launching Lab Environment

1. To launch the lab environment, Click on the Start Lab button.
2. Please wait until the cloud environment is provisioned. It will take less than a minute to provision.

3. Once the Lab is started, you will be provided with **IAM user name**, **Password**, **Access Key**, and **Secret Access Key**.

Note : You can only start one lab at any given time

© 2023, Whizlabs Software Pvt. Ltd.