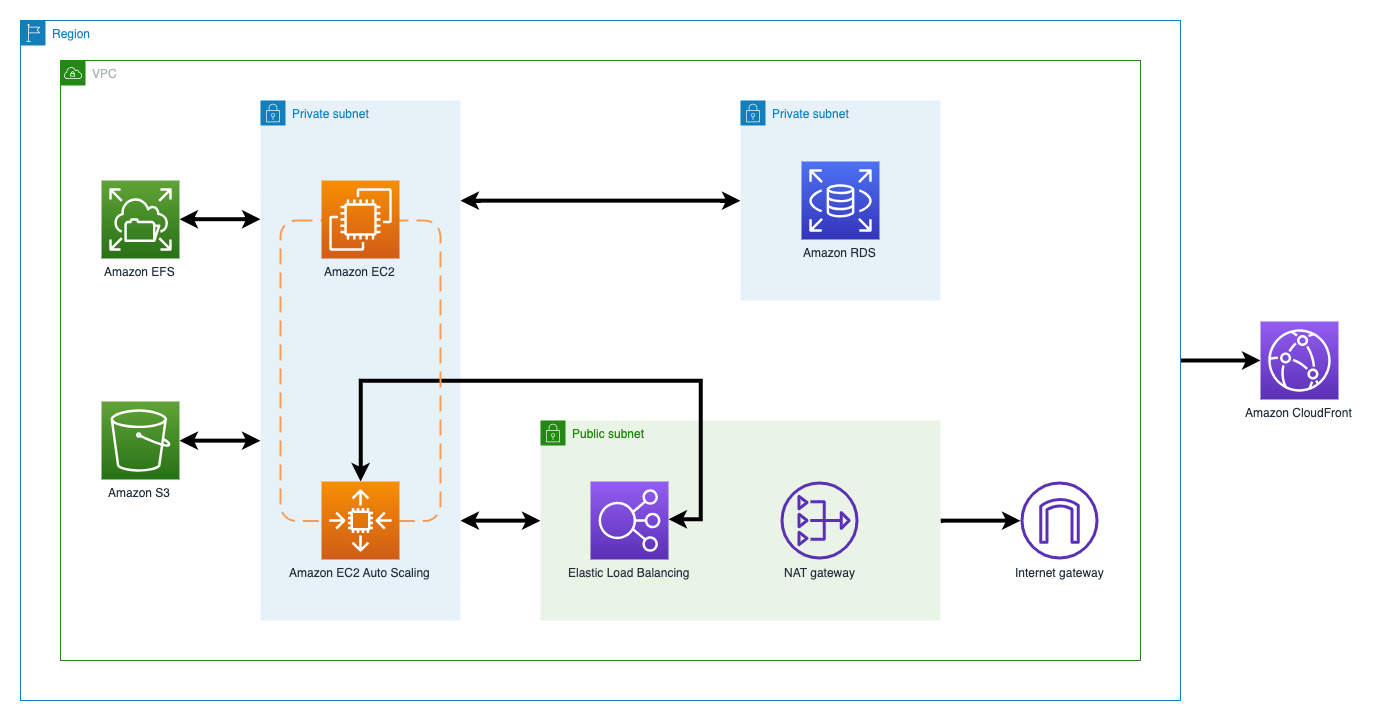
**Introduction to Terraform on AWS**

[Terraform AWS Workshop-Project]

**Introduction - Scenario**

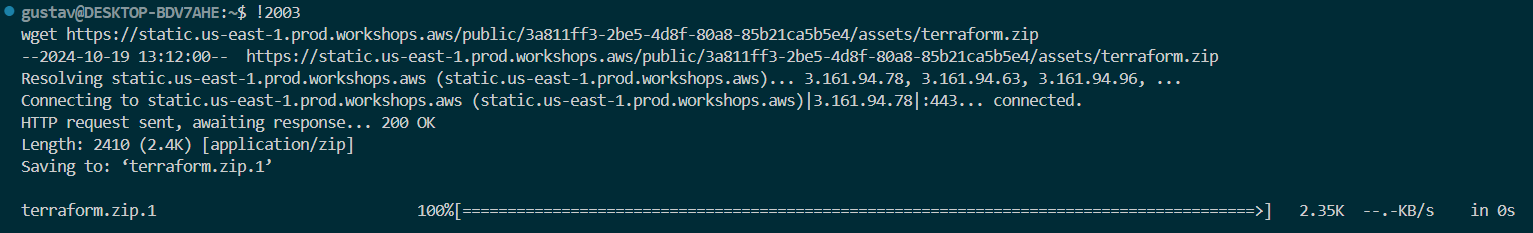
In this project, I will use Terraform as the Infrastructure as Code (IaC) tool to deploy a highly available Wordpress application in a single region. It will be configured to leverage a Multi-AZ (data replication across multiple AZs) MySQL database and an auto-scaler based on CPU utilization for web hosting.

**Architecture - Overview**



**Environment Configuration Set-Up**

Link: <https://static.us-east-1.prod.workshops.aws/public/3a811ff3-2be5-4d8f-80a8-85b21ca5b5e4/assets/terraform.zip>

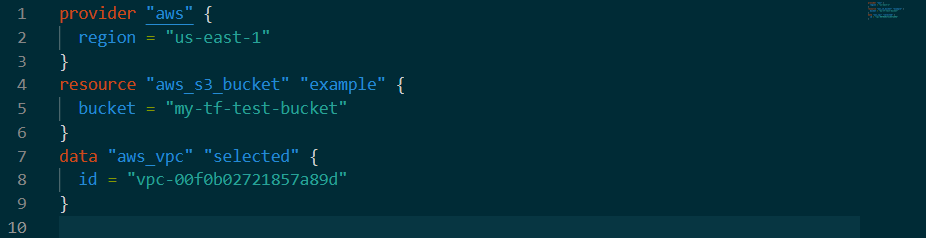
****

**Update the input variables, provider, local values, and data sources -Folder Structure.**

**A white background with black and white clouds

Description automatically generated with medium confidence**

**Providers, Resources, and Data Sources – eg:**



**Data sources**

A screenshot of a computer program

Description automatically generated

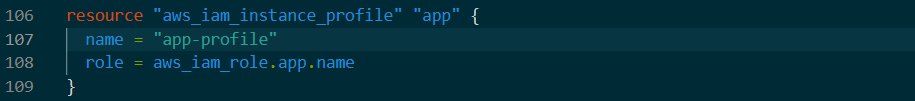
**Creating Resources for IAM**

This will allow the EC2 instance to read from the S3 bucket and get full access permissions to the RDS resource.

Updating the main.tf appending IAM roles and instance profiles from the **Data sources**.

A screen shot of a computer

Description automatically generated



**Terraform Initialized**

**A screenshot of a computer program

Description automatically generated**

**Successful creation of the iam role and instance profiles**

**A blue background with white text

Description automatically generated**

**Creating Networking Resources**

Updating the main.tf appending the networking content, such as the subnets, internet gateway, route tables and NAT gateway.

**A computer screen with text

Description automatically generated**

**Subnets**

**A screenshot of a computer

Description automatically generated**

**Nat gateways**

****

**Creating Security Resources**

Updating the main.tf appending the security content.

A screen shot of a computer

Description automatically generated

**Security Groups**

****

**Endpoints**

**A screenshot of a computer

Description automatically generated**

**Creating Application Resources**

This will create the RDS MySQL database, a load balancer, an autoscaling group, an EFS file system, an S3 bucket.

Updating the main.tf appending the application content

A computer code on a dark background

Description automatically generated

**Console view of created resources**

**EC2**

**A screenshot of a computer

Description automatically generated**

**EFS**

**A screenshot of a computer

Description automatically generated**

**RDS**

**A screenshot of a computer

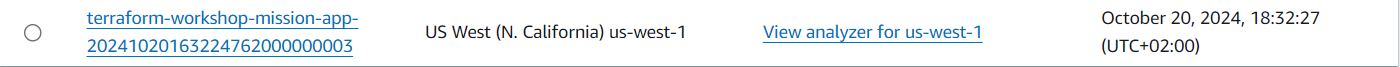
Description automatically generated**

**Cloudwatch**

**A screenshot of a computer

Description automatically generated**

**S3**

****

**ACM**

**A screenshot of a computer

Description automatically generated**

**ELB**

**A screenshot of a computer

Description automatically generated**

**Validate Application Deployment**

**A computer screen shot of a computer

Description automatically generated**

**Wordpress Application Deployed!**

**A white background with black text

Description automatically generated**

**Done!**