**TERRAFORM NOTES JOEL**

1. Installing Terraform in linux

$ wget <https://releases.hashicorp.com/terraform/0.12.19/terraform_0.12.19_linux_amd64.zip>

$ unzip terraform….zip

$ sudo mv terraform /usr/local/bin move the executable into bin

$ terraform version check to see if terraform is installed

$ sudo vi provider.tf create a terraform providers file to specify the provider

provider "aws" {

region **=** "us-west-2"

access\_key **=** "my-access-key"

secret\_key **=** "my-secret-key"

}

$ sudo main.tf Create an EC2 instance (spinning an ec2 instance)

|  |
| --- |
|  |
| resource "aws\_instance" "example" { |
|  | # AMI ID for Amazon Linux AMI 2018.03.0 (HVM) |
|  | ami = "ami-0c64dd618a49aeee8" (replace with your image Id **ami-02ccb28830b645a41**) |
|  | instance\_type = "t3.micro" (change to t2.micro because it is free) |
|  |  |
|  | tags = { |
|  | Name = "example" |
|  | } |
|  | } |
|  |  |

Note Run three main commands:

$ terraform init (initializes the files)

$ terraform plan (to specify the configurations)

$ terraform apply (to execute the process)

Incase you have problems with the main file. You can alter the file and then after run the process starting from $ terraform plan and not initialize.

NOTE: Remember to change the Region in the provider file (provider.tf) to the region of your instance.

Example:

provider "aws" {

region = "us-west-2" (change to “us-east-2”)

access\_key = "AKIAV5WHDYOMP2WE2TUU"

secret\_key = "mf1yGg+FU0KT/n49GhO0UxArlU4VvbuUnE0Tt9Hi"

}

**TERRAFORM ROLES / MODULES (we use them because they are reuseable, they can be called anytime you want to use them)**

1. Create a vars.tf file ($ sudo vi vars.tf)
2. Specify the variables in the vars.tf file
3. Call the variables in the main.tf file using calling script

**NOTE: IT is easy to destroy any spin that is created with terraform by just using one command**

$ terraform destroy

We can install anything inside our instance by simply providing the linux command for installation at the bottom of the main.tf

Example:

|  |
| --- |
| resource "aws\_instance" "example" { |
|  | # AMI ID for Amazon Linux AMI 2018.03.0 (HVM) |
|  | ami = "ami-0c64dd618a49aeee8" (replace with your image Id **ami-02ccb28830b645a41**) |
|  | instance\_type = "t3.micro" (change to t2.micro because it is free) |
|  |  |
|  | tags = { |
|  | Name = "example" |
|  | } |
|  | } |

yum install git -y