



Terraform Dark Launch Deployments with Lambda Functions

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Table of Contents

| | |
|----------------------|----------|
| Overview..... | 2 |
| Lab 1 | 2 |

Overview

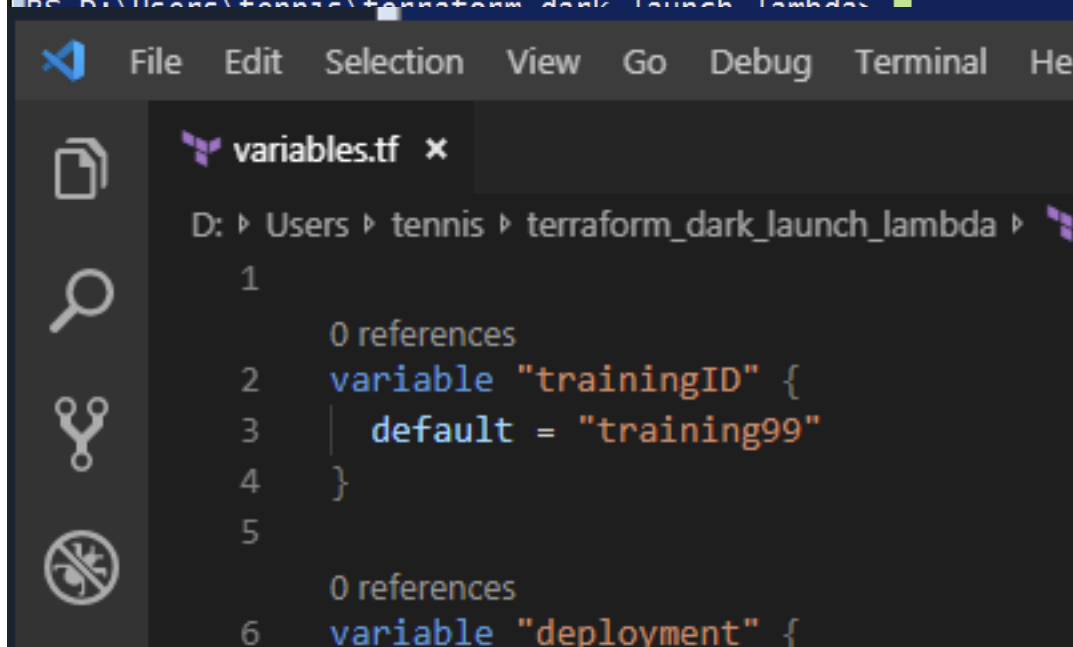
Lab 1

1. Open a shell in your WorkSpace
2. Clone a copy of https://github.com/RoundTower-io/terraform_dark_launch_lambda.git

```
PS D:\Users\tennis> git clone https://github.com/RoundTower-io/terraform_dark_launch_lambda.git
Cloning into 'terraform_dark_launch_lambda'...
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), done.
PS D:\Users\tennis>
```

3. Edit the 'variables.tf' file and change the training ID value to match your own

```
PS D:\Users\tennis\terraform_dark_launch_lambda> code .\variables.tf
```



Save and close the file.

4. Initialize terraform with the following command

```
terraform init
```

```
PS D:\Users\tennis\terraform_dark_launch_lambda> terraform init

Initializing the backend...

Initializing provider plugins...
- Checking for available provider plugins...
- Downloading plugin for provider "aws" (terraform-providers/aws) 2.25.0...
- Downloading plugin for provider "archive" (terraform-providers/archive) 1.2.2...

The following providers do not have any version constraints in configuration,
so the latest version was installed.

To prevent automatic upgrades to new major versions that may contain breaking
changes, it is recommended to add version = "..." constraints to the
corresponding provider blocks in configuration, with the constraint strings
suggested below.

* provider.archive: version = "~> 1.2"
* provider.aws: version = "~> 2.25"

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS D:\Users\tennis\terraform_dark_launch_lambda>
```

5. Create the lambda function by applying the terraform script

```
terraform apply -auto-approve
```

```
PS D:\Users\tennis\terraform_dark_launch_lambda> terraform apply -auto-approve
data.archive_file.init: Refreshing state...
aws_iam_role.lambda_exec: Creating...
aws_api_gateway_rest_api.example: Creating...
aws_s3_bucket.b: Creating...
aws_iam_role.lambda_exec: Creation complete after 1s [id=training99_dark_launch_example_lambda]
aws_api_gateway_rest_api.example: Creation complete after 1s [id=c4jegk66qf]
aws_api_gateway_resource.proxy: Creating...
aws_api_gateway_method.proxy_root: Creating...
aws_api_gateway_method.proxy_root: Creation complete after 0s [id=agm-c4jegk66qf-57tmqbrbmb-ANY]
aws_api_gateway_resource.proxy: Creation complete after 0s [id=pdnmby]
aws_api_gateway_method.proxy: Creating...
aws_api_gateway_method.proxy: Creation complete after 0s [id=agm-c4jegk66qf-pdnmby-ANY]
aws_s3_bucket.b: Creation complete after 2s [id=training99-rtt-terraform-dark-launch-example]
aws_s3_bucket_object.dark: Creating...
aws_lambda_function.example: Creating...
aws_s3_bucket_object.dark: Creation complete after 1s [id=dark.zip]
aws_lambda_function.example: Still creating... [10s elapsed]
aws_lambda_function.example: Creation complete after 17s [id=training99_dark_launch]
aws_api_gateway_integration.lambda: Creating...
aws_api_gateway_integration.lambda_root: Creating...
aws_api_gateway_integration.lambda: Creation complete after 0s [id=agi-c4jegk66qf-pdnmby-ANY]
aws_api_gateway_integration.lambda_root: Creation complete after 0s [id=agi-c4jegk66qf-57tmqbrbmb-ANY]
aws_api_gateway_deployment.example: Creating...
aws_lambda_permission.apigw: Creating...
aws_lambda_permission.apigw: Creation complete after 0s [id=AllowAPIGatewayInvoke]

Apply complete! Resources: 12 added, 0 changed, 0 destroyed.

Outputs:
base_url = https://c4jegk66qf.execute-api.us-east-2.amazonaws.com/test
```

6. Copy the "base_url" on your screen and paste it in a browser. What do you get?
7. Notice that not everyone will get the same answer. Any ideas why?
8. Have a look at "./dark/main.js" for the answer.

9. Take down your environment with the following command

terraform destroy -auto-approve

```
PS D:\Users\tennis\terraform_dark_launch_lambda> terraform destroy -auto-approve
data.archive_file.init: Refreshing state...
aws_api_gateway_rest_api.example: Refreshing state... [id=c4jegk66qf]
aws_s3_bucket.b: Refreshing state... [id=training99-rtt-terraform-dark-launch-example]
aws_iam_role.lambda_exec: Refreshing state... [id=training99_dark_launch_example_lambda]
aws_api_gateway_resource.proxy: Refreshing state... [id=pdnmby]
aws_api_gateway_method.proxy_root: Refreshing state... [id=agm-c4jegk66qf-57tmqbrbmb-ANY]
aws_api_gateway_method.proxy: Refreshing state... [id=agm-c4jegk66qf-pdnmby-ANY]
aws_lambda_function.example: Refreshing state... [id=training99_dark_launch]
aws_s3_bucket_object.dark: Refreshing state... [id=dark.zip]
aws_api_gateway_integration.lambda_root: Refreshing state... [id=agi-c4jegk66qf-57tmqbrbmb-ANY]
aws_api_gateway_integration.lambda: Refreshing state... [id=agi-c4jegk66qf-pdnmby-ANY]
aws_api_gateway_deployment.example: Refreshing state... [id=zbr4yb]
aws_lambda_permission.apigw: Refreshing state... [id=AllowAPIGatewayInvoke]
aws_lambda_permission.apigw: Destroying... [id=AllowAPIGatewayInvoke]
aws_s3_bucket_object.dark: Destroying... [id=dark.zip]
aws_s3_bucket_object.dark: Destruction complete after 0s
aws_lambda_permission.apigw: Destruction complete after 0s
aws_api_gateway_deployment.example: Destroying... [id=zbr4yb]
aws_api_gateway_deployment.example: Destruction complete after 0s
aws_api_gateway_integration.lambda: Destroying... [id=agi-c4jegk66qf-pdnmby-ANY]
aws_api_gateway_integration.lambda_root: Destroying... [id=agi-c4jegk66qf-57tmqbrbmb-ANY]
aws_api_gateway_integration.lambda: Destruction complete after 0s
aws_api_gateway_integration.lambda_root: Destruction complete after 0s
aws_api_gateway_method.proxy: Destroying... [id=agm-c4jegk66qf-pdnmby-ANY]
aws_api_gateway_method.proxy_root: Destroying... [id=agm-c4jegk66qf-57tmqbrbmb-ANY]
aws_lambda_function.example: Destroying... [id=training99_dark_launch]
aws_api_gateway_method.proxy: Destruction complete after 1s
aws_api_gateway_method.proxy_root: Destruction complete after 1s
aws_api_gateway_resource.proxy: Destroying... [id=pdnmby]
aws_lambda_function.example: Destruction complete after 1s
aws_iam_role.lambda_exec: Destroying... [id=training99_dark_launch_example_lambda]
aws_s3_bucket.b: Destroying... [id=training99-rtt-terraform-dark-launch-example]
aws_api_gateway_resource.proxy: Destruction complete after 0s
aws_api_gateway_rest_api.example: Destroying... [id=c4jegk66qf]
aws_iam_role.lambda_exec: Destruction complete after 0s
aws_api_gateway_rest_api.example: Destruction complete after 0s
aws_s3_bucket.b: Destruction complete after 0s

Destroy complete! Resources: 12 destroyed.
```