

justin-irl /
CSDO1010-007-B-W24-LAB2



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CSDO1010-007-B-W24-LAB2 / lab_report.md 

justin-irl missing report updates

2 minutes ago



113 lines (81 loc) · 3.21 KB

CSDO1010-007-B-W24-LAB2 Report

Task

- Manage AWS Infrastructure with Terraform

Requirements

- terraform and aws cli command line outputs for version commands
- webserver-Public-URL and the url assigned from the end of the Terraform apply output.
 - Please do not include all of the output from apply, just the webserver-Public-URL value
- The Cloud Computing Course webpage in your browser, including the address bar showing the url
- Provisioned Infrastructure as viewed through your AWS account, including the public IP of your webserver, under Instances.

Report

- terraform and aws cli command line outputs for version commands

```
~/justin-irl/CSDO1010-007-B-W24-LAB2 on ʘ main
$ > terraform --version
Terraform v1.7.5
on darwin_arm64

~/justin-irl/CSDO1010-007-B-W24-LAB2 on ʘ main ●
$ > aws --version
aws-cli/2.15.32 Python/3.11.8 Darwin/23.4.0 exe/x86_64 prompt/off
```

- webserver-Public-URL and the url assigned from the end of the Terraform apply output.

```
Apply complete! Resources: 7 added, 0 changed, 0 destroyed.

Outputs:

Webserver-Public-URL = "http://35.174.109.58"
```

- The Cloud Computing Course webpage in your browser, including the address bar showing the url

Cloud Computing

Public vs Private vs Hybrid Cloud

GCP

AWS

Azure

Cloud Computing Strategy Program

Applied Approaches to Cloud Adoption

Congratulations on completing the labs of applied approaches to cloud adoption course and building a highly available web application using the services of the public cloud market leaders (AWS, Azure, and GCP). Hopefully, you enjoyed the course and labs so far.

I wish you all the best on completing the course successfully. Enjoy watching the videos!

What is Cloud Computing?

What is Cloud Computing?

Watch Later Share

What is Cloud Computing?

Watch on YouTube

Public Cloud vs Private Cloud vs Hybrid Cloud

Public Cloud vs Private Cloud vs Hybrid Cloud

Watch Later Share

Sunday, Mar 31, 2024, 08:23 AM

Host 35.174.109.58

CLOUD COMPUTING			
Infrastructure as a Service	Platform as a Service	Software as a Service	
Application	Application	Application	
Data	Data	Data	
Runtime	Runtime	Runtime	
Middleware	Middleware	Middleware	
OS	OS	OS	
Virtualization	Virtualization	Virtualization	
Network	Network	Network	
Storage	Storage	Storage	
Networking	Networking	Networking	



- Provisioned Infrastructure as viewed through your AWS account, including the public IP of your webserver, under Instances.

The top screenshot displays the AWS Management Console 'Subnets' page. The left sidebar shows the 'VPC dashboard' and 'Virtual private cloud' sections. The main content area shows the 'Terraform-Subnet' (subnet-086804ddb23eaa4b0) in the 'us-east-1' region. The subnet is in the 'Available' state and is associated with the 'vpc-05818e1ee45612fe0' VPC. The subnet's IP address range is 10.0.1.0/24. The 'Details' tab is selected, showing various attributes such as Subnet ID, Subnet ARN, State, Availability Zone, and IP address range.

The bottom screenshot displays the AWS Management Console 'Instances' page. The left sidebar shows the 'EC2 Dashboard' and 'Instances' sections. The main content area shows the 'webserver' instance (i-099867f58b1074891) in the 'us-east-1' region. The instance is in the 'Running' state and is associated with the 't2.micro' instance type. The instance's public IP address is 35.174.109.58. The 'Details' tab is selected, showing various attributes such as Instance ID, Instance state, Instance type, Status check, and Public IP address.

Note

- I already have an AWS free account from a previous project.
 - Account updated according to doc and Admin account created with required scopes.
- VsCode already pre installed and configured with the required extensions from previous work.

Terraform issue with Mac M(2) chip

- hashicorp tapped and terraform installed at version 1.7.5
 - most recent version for arm64/m chips as of this writing

Encountered some issues at this stage with the `terraform init` command:

```
~/justin-irl/CSDO1010-007-B-W24-LAB2 on □ main ●  
$ > terraform init  
  
Initializing the backend...  
Initializing modules...  
  
Initializing provider plugins...  
- Finding latest version of hashicorp/template...  
- Finding hashicorp/aws versions matching "~> 3.44.0"...  
- Installing hashicorp/aws v3.44.0...  
- Installed hashicorp/aws v3.44.0 (signed by HashiCorp)  
  
| Error: Incompatible provider version  
  
| Provider registry.terraform.io/hashicorp/template v2.2.0 does not have a package available for this platform.  
  
| Provider releases are separate from Terraform CLI releases, so not all providers are supported on all platforms.
```

Solution

```
#control versioning by project:  
brew install tfenv  
  
tfenv init  
  
tfenv install 1.7.5 && tfenv use 1.7.5  
  
# add `terraform-version`  
tfenv pin  
  
# provider helper  
brew install kreuzwerker/taps/m1-terraform-provider-helper  
  
m1-terraform-provider-helper activate  
  
m1-terraform-provider-helper install hashicorp/template -v v2.2.0  
  
reload shell  
  
exec $SHELL
```

update ./main/tf to include:

```
terraform {  
  required_providers {  
    aws = {  
      source = "hashicorp/aws"  
      version = "5.43.0"  
    }  
  }  
}
```



then run the following according to the provided doc (with the addition to terraform apply):

```
terraform init && terraform validate && terraform fmt && terraform plan -out=tfplan
```



```
terraform apply "tfplan"
```

```
### note
```

```
# it takes about 30-60 seconds from the time the apply command is run to the time the
```

