

Evidências da implantação:

EXPLORADOR

TRABALHO-TERRAFORM

infraestructure

infraestruct

.terraform

.terraform.lock.hcl

ec2.tf

efs.tf

infracost.exe

main.tf

provider.tf

security_group.tf

terraform.tfvars

variables.tf

versions.tf

vpc.tf

scripts

userdata.sh

terraform.tfstate

ESTRUTURA DO CÓDIGO

LINHA DO TEMPO

SERVERS

terraform.tfvars

vpc.tf

userdata.sh

efs.tf

infracost.exe

ec2.tf

security_group.tf

infraestructure > efs.tf > resource "aws_efs_mount_target" "efs-mt-example" > subnet_id

```
1 resource "aws_efs_file_system" "efs-example" {
2   creation_token = "efs-trabalho-final-devops"
3   performance_mode = "generalPurpose"
4   throughput_mode = "bursting"
5   encrypted = "true"
6   tags = {
7     Name = "TrabalhoFinalDevops"
8   }
9 }
10
11 resource "aws_efs_mount_target" "efs-mt-example" {
12   file_system_id = aws_efs_file_system.efs-example.id
13   subnet_id = aws_subnet.this.id
14   security_groups = ["${aws_security_group.efs.id}"]
15 }
```

PROBLEMAS

SAÍDA

CONSOLE DE DEPURACÃO

TERMINAL

powerShell

+

[-]

aws_efs_mount_target.efs-mt-example: Still creating... [10s elapsed]

aws_instance.this[0]: Still creating... [10s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [20s elapsed]

aws_instance.this[0]: Still creating... [20s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [30s elapsed]

aws_instance.this[0]: Still creating... [30s elapsed]

aws_instance.this[0]: Creation complete after 35s [id=i-006942bfe9e9a8f84]

aws_efs_mount_target.efs-mt-example: Still creating... [40s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [50s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [1m0s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [1m10s elapsed]

aws_efs_mount_target.efs-mt-example: Still creating... [1m20s elapsed]

aws_efs_mount_target.efs-mt-example: Creation complete after 1m30s [id=fsmt-0ee2867475aa51b5c]

Apply complete! Resources: 10 added, 0 changed, 0 destroyed.

PS C:\Users\thaba\Desktop\devops\Trabalho-Terraform\infrastructure>

EC2:

New EC2 Experience

Tell us what you think

Painel EC2

Visualização Global do EC2

Eventos

Tags

Limites

Instâncias

Instâncias

New

Tipos de instância

Modelos de execução

Solicitações spot

Savings Plans

Instâncias reservadas

Hosts dedicados

Instâncias programadas

Instâncias (1/1)

Informações

Conectar

Estado da instância

Ações

Executar instâncias

Find instância by attribute or tag (case-sensitive)

Estado da instância: running

Limpar filtros

<input checked="" type="checkbox"/>	Name	ID de instância	Estado da inst...	Tipo de inst...	Verificação de s...	Status do al...
<input checked="" type="checkbox"/>	ecommerce-default-ec2	i-006942bfe9e9a8f84	Executando	t2.micro	2/2 verificações a	Sem alar...

Instância: i-006942bfe9e9a8f84 (ecommerce-default-ec2)

Detalhes

Segurança

Redes

Armazenamento

Verificações de status

Monitoramento

Tags

Resumo da instância

Informações

ID de instância

i-006942bfe9e9a8f84 (ecommerce-default-ec2)

Endereço IPv6

-

Endereço IPv4 público

3.89.247.104 | endereço aberto

Estado da instância

Executando

Endereços IPv4 privados

10.0.1.166

DNS IPv4 público

-

Acessando EC2 via SSH:

```
liunx-dev@DESKTOP-5RCPJ20: ~/.ssh$ ssh -i id_rsa ubuntu@3.89.247.104
The authenticity of host '3.89.247.104 (3.89.247.104)' can't be established.
ECDSA key fingerprint is SHA256:0cQreJL/b8ZWws4/dzGcYvn9WoErXk6QXpyzgv5Wk0.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '3.89.247.104' (ECDSA) to the list of known hosts.
Enter passphrase for key 'id_rsa':
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1026-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sat Dec  3 02:05:43 UTC 2022

System load:  0.0               Processes:            107
Usage of /:   31.2% of 7.57GB   Users logged in:     0
Memory usage: 28%              IPv4 address for docker0: 172.17.0.1
Swap usage:   0%               IPv4 address for eth0:  10.0.1.166

0 updates can be applied immediately.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-1-166:~$
```

EFS:

Elastic File System

Sistemas de arquivos

Pontos de acesso

AWS Backup

AWS DataSync

Transferência da AWS

Documentação

Apresentação do Amazon EFS Elastic Throughput

O Elastic Throughput do Amazon EFS oferece performance que aumenta e diminui a escala verticalmente para atender aos requisitos de throughput da workload. O Elastic Throughput elimina o provisionamento e o planejamento de desempenho, e você paga apenas pelo que usar. Saiba mais

Amazon EFS > Sistemas de arquivos

Sistemas de arquivos (1)

Visualizar detalhes

Excluir

Criar sistema de arquivos

Filtrar por valores de propriedade

< 1 >

Nome	ID do sistema de arquivos	Criptografado	Tamanho total	Tamanho na categoria Standard/On e Zone	Tamanho na categoria Standard-IA/One Zone-IA
<input type="radio"/> TrabalhoFinalDevops	fs-07ecef0fe796159af	<input checked="" type="checkbox"/> Criptografado	6.00 KiB	6.00 KiB	0 bytes

Montagem do EFS na instância do EC2:

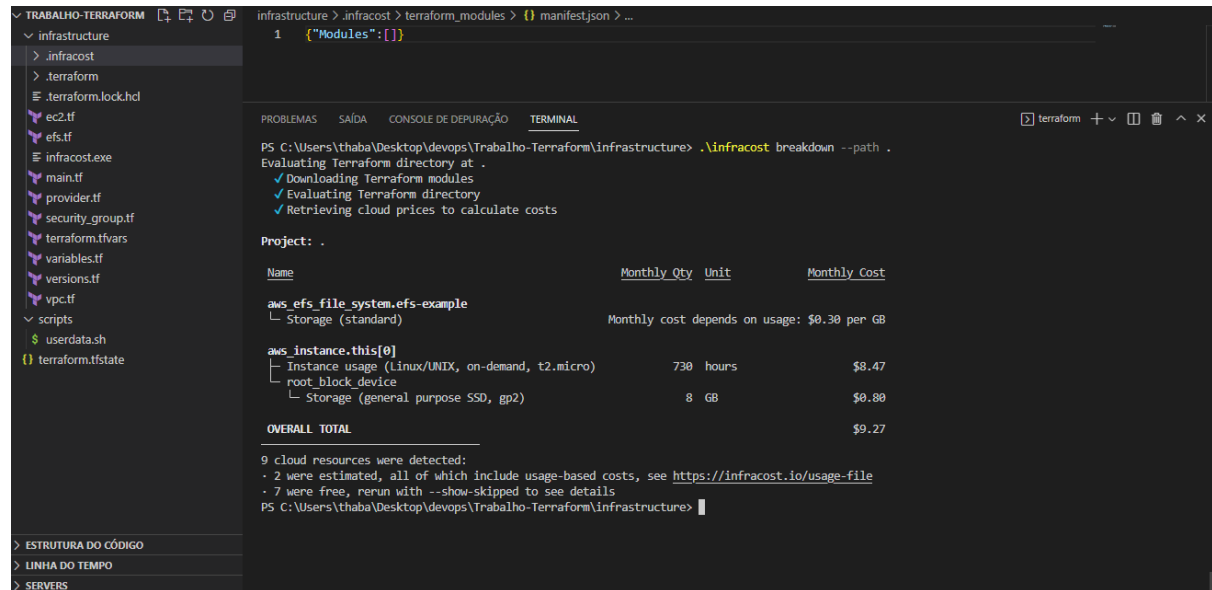
```
ubuntu@ip-10-0-1-128:~/efs$ df -Th
Filesystem      Type      Size  Used Avail Use% Mounted on
udev            devtmpfs  473M   0    473M   0% /dev
tmpfs           tmpfs     98M   876K  97M   1% /run
/dev/xvda1      ext4      7.6G  2.1G  5.5G  28% /
tmpfs           tmpfs     488M   0    488M   0% /dev/shm
tmpfs           tmpfs     5.0M   0    5.0M   0% /run/lock
tmpfs           tmpfs     488M   0    488M   0% /sys/fs/cgroup
/dev/xvda15     vfat      105M  4.4M  100M   5% /boot/efi
/dev/loop0      squashfs  50M    50M   0 100% /snap/snapd/17883
/dev/loop1      squashfs  56M    56M   0 100% /snap/core18/2632
/dev/loop2      squashfs  25M    25M   0 100% /snap/amazon-ssm-agent/6312
tmpfs           tmpfs     98M   0    98M   0% /run/user/1000
10.0.1.62:/     nfs4      8.0E   0    8.0E   0% /home/ubuntu/efs
```

Acessando site hospedado na instância EC2 na porta 8080:



It works!

Custo para montar a infraestrutura:



```
infrastructure > .\infracost > terraform_modules > {} manifest.json > ...
1 {"Modules":{}}
```

PROBLEMAS SAÍDA CONSOLE DE DEPURACÃO TERMINAL

PS C:\Users\thaba\Desktop\devops\Trabalho-Terraform\infrastructure> .\infracost breakdown --path .
Evaluating Terraform directory at .
✓ Downloading Terraform modules
✓ Evaluating Terraform directory
✓ Retrieving cloud prices to calculate costs

Project: .

Name	Monthly Qty	Unit	Monthly Cost
aws_efs_file_system.efs-example			
└ Storage (standard)	Monthly cost depends on usage: \$0.30 per GB		
aws_instance.this[0]			
└ Instance usage (linux/UNIX, on-demand, t2.micro)	730	hours	\$8.47
└ root block device			
└─ Storage (general purpose SSD, gp2)	8	GB	\$0.80
OVERALL TOTAL			\$9.27

9 cloud resources were detected:
- 2 were estimated, all of which include usage-based costs, see <https://infracost.io/usage-file>
- 7 were free, rerun with --show-skipped to see details

PS C:\Users\thaba\Desktop\devops\Trabalho-Terraform\infrastructure>

URL do Github:

- <https://github.com/rodrigo-prado-projetos/terraform-aws>