Desafío No. 5

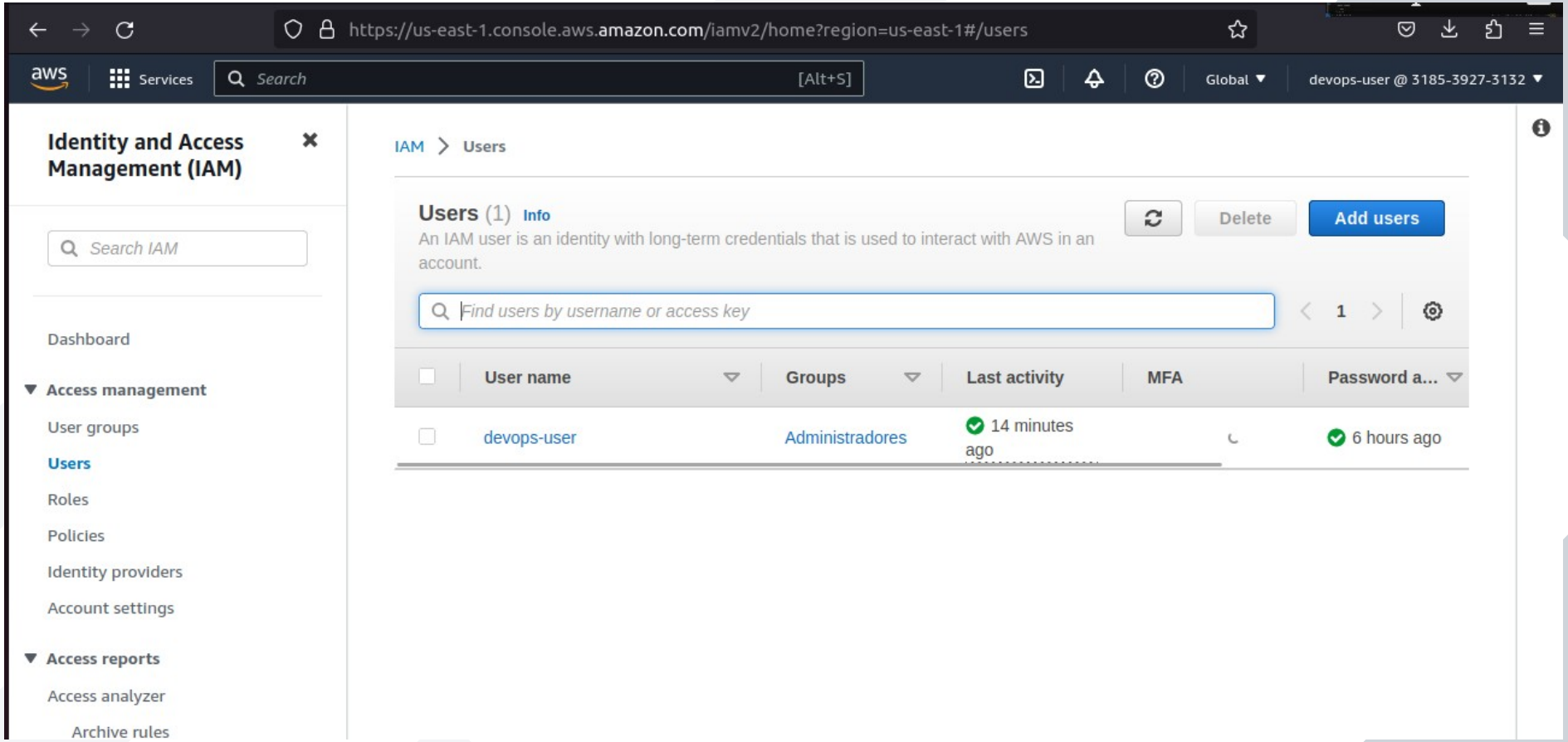
Bootcamp DevOps 63703

Presentado por:
Marco Vanegas
2023

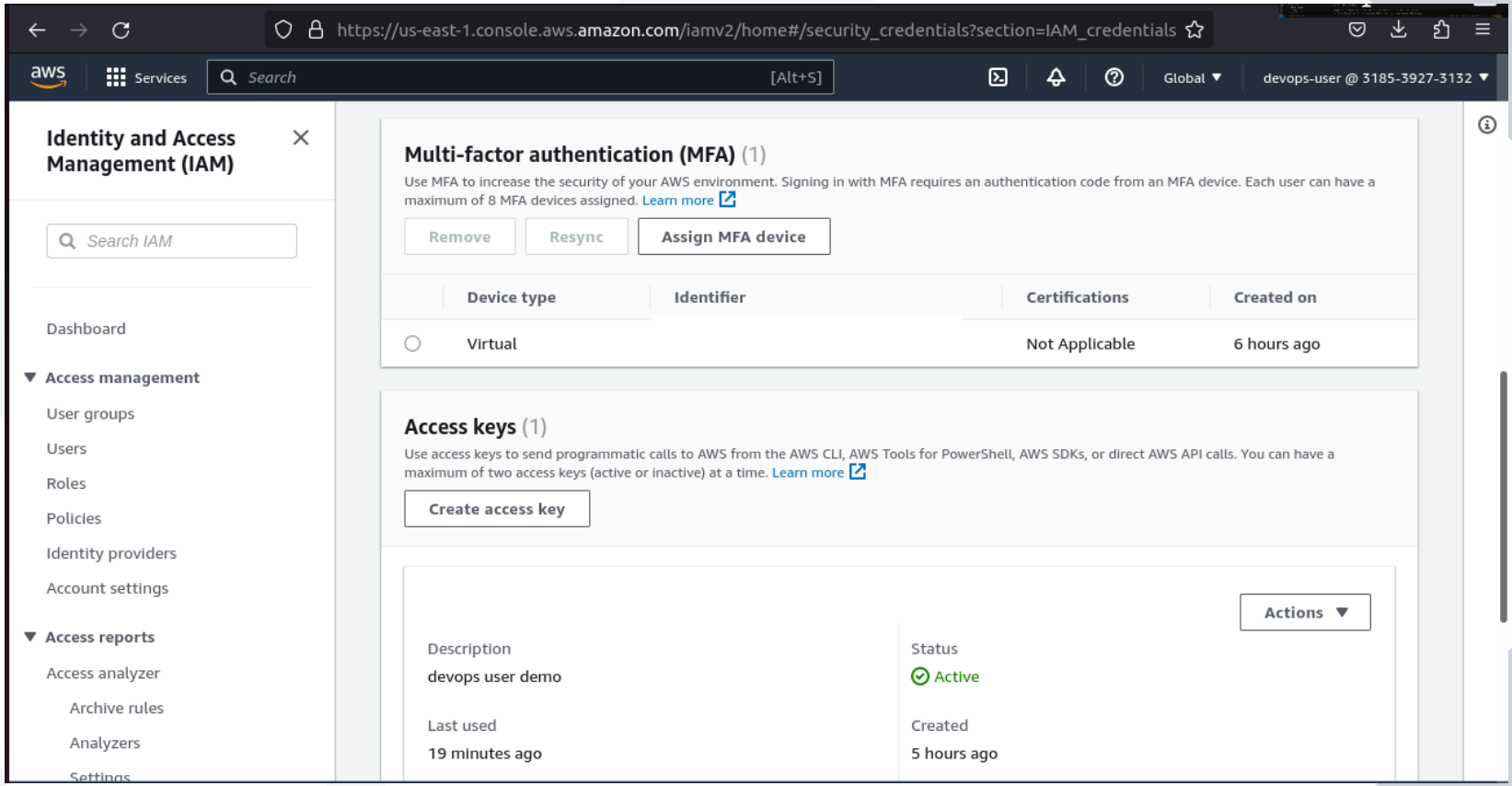
PARTE I : Creación de una instancia en AWS mediante Terraform.

Illustrations by Pixeltrue on icons8

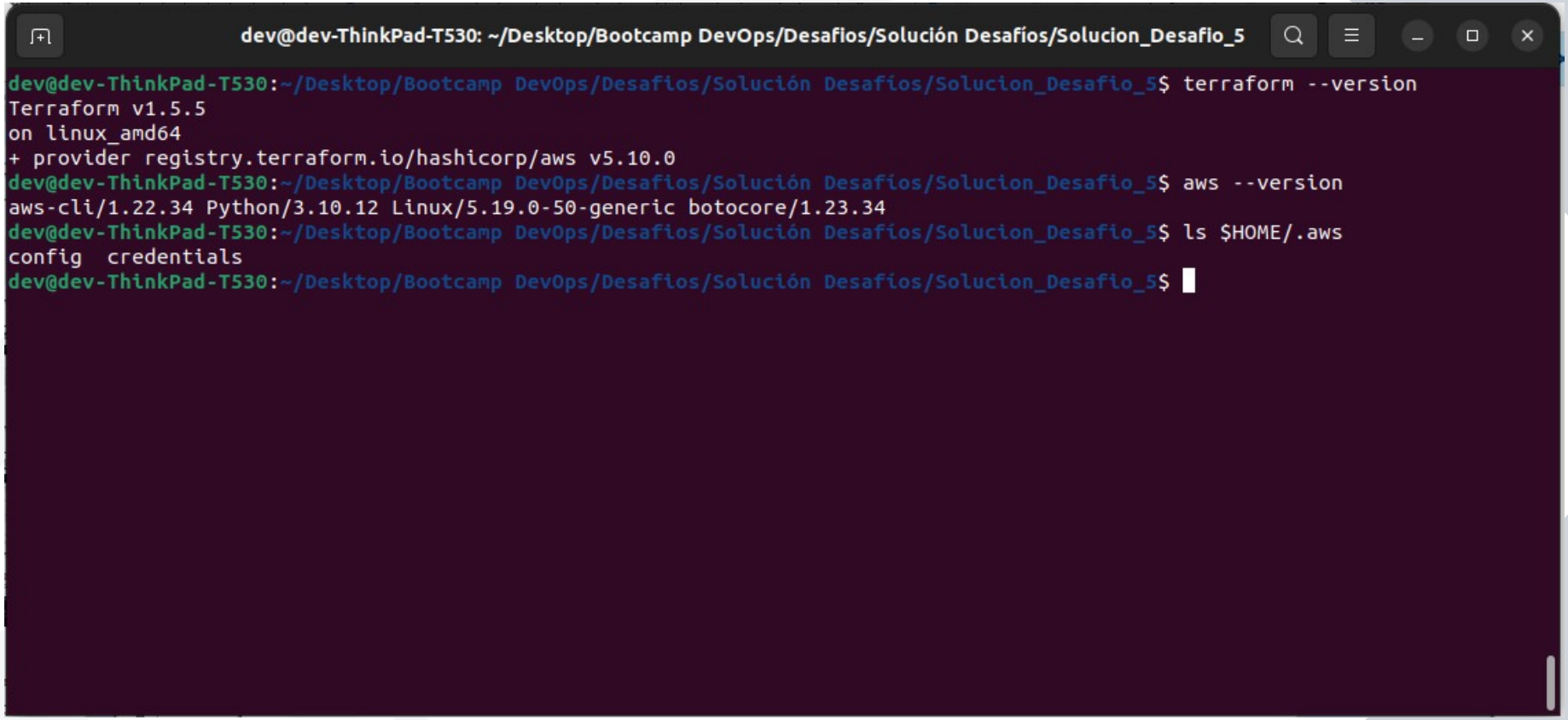
1. Una vez creada una cuenta gratuita en AWS, se procedió con la creación de un usuario con su respectivo grupo mediante la opción Identity and Access Management (IAM).



2. También mediante la opción Security Credentials se añadió doble factor de autenticación - Multi-factor authentication (MFA) para el usuario principal y el segundo usuario creado. Posteriormente, se crearon los Access Keys para acceder mediante terminal.



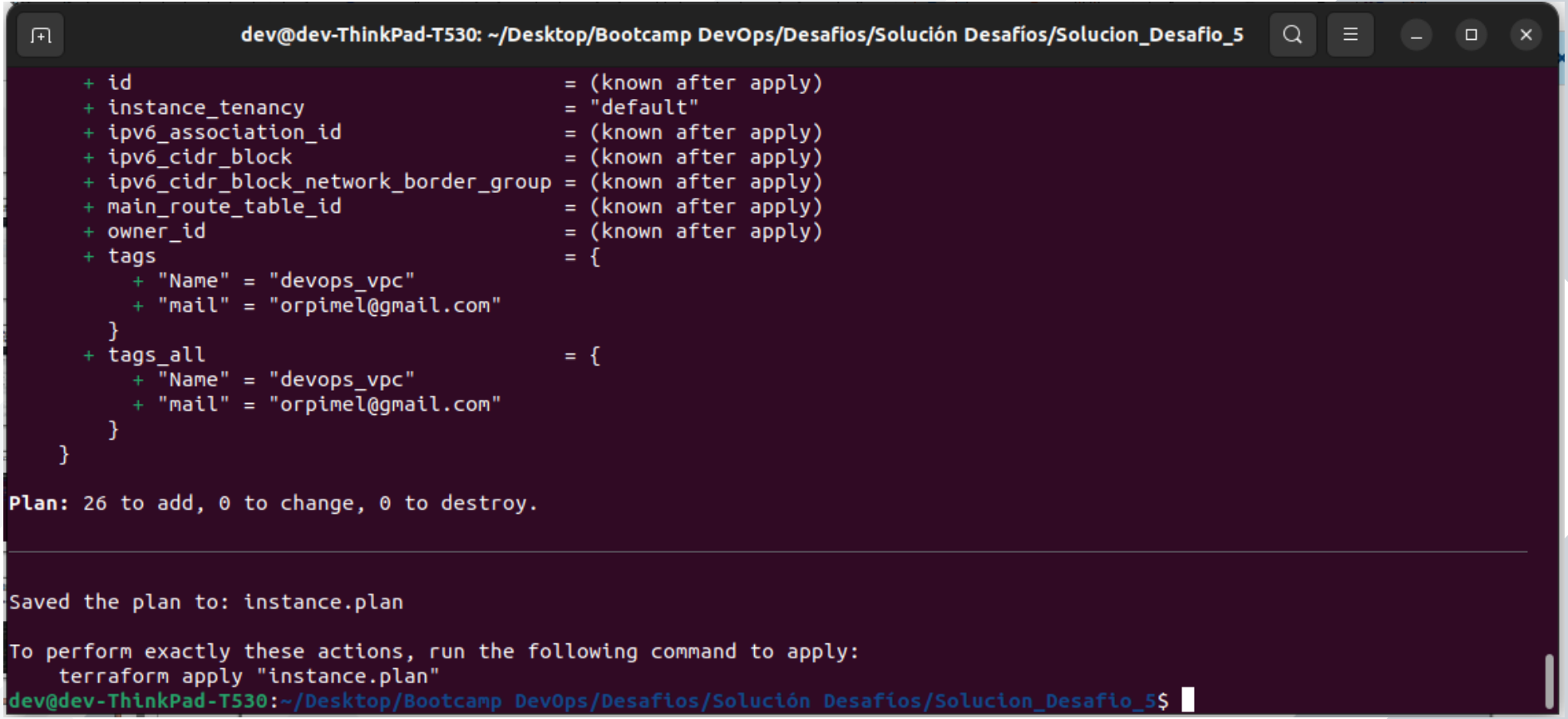
3. Luego se instaló Terraform y AWS-CLI en la máquina local, e igualmente se configuró AWS mediante el comando aws configure.



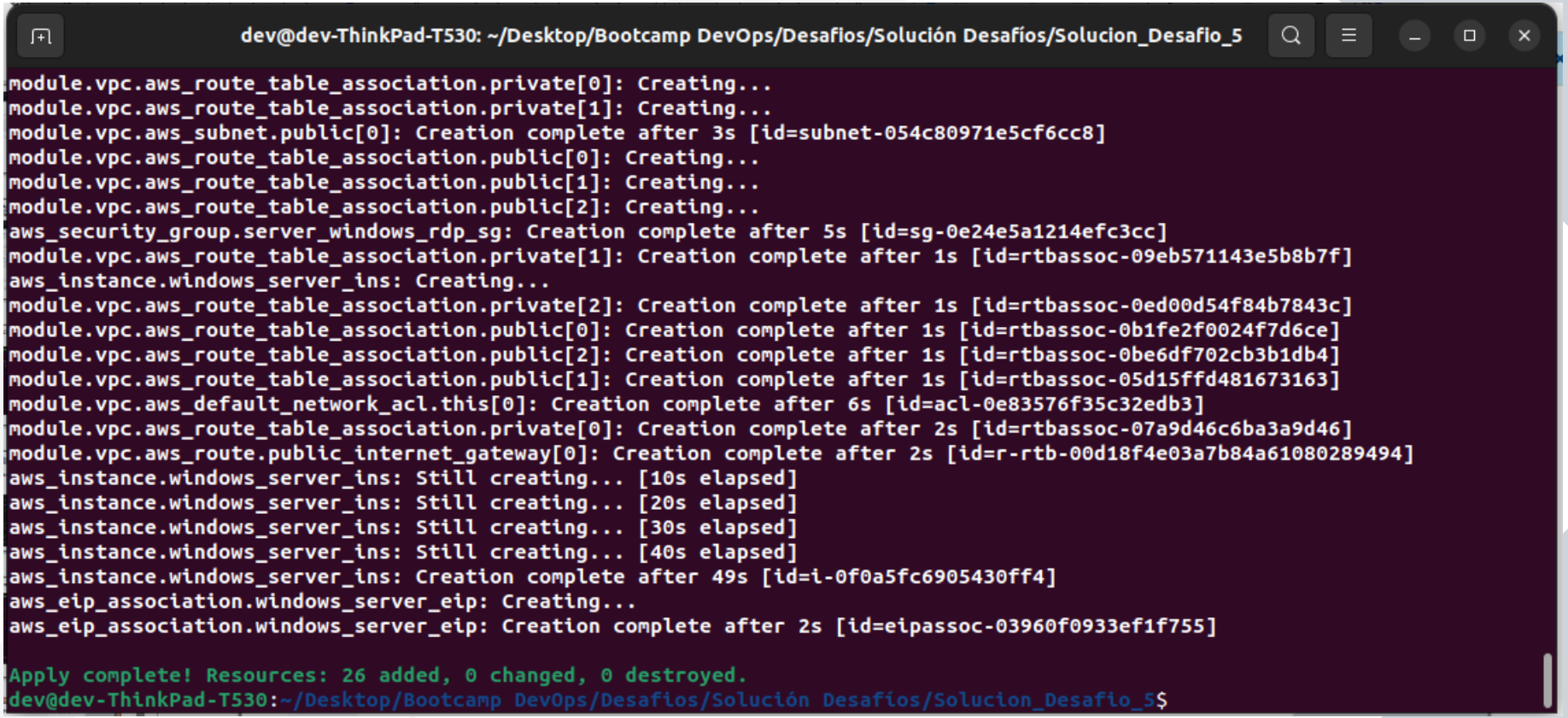
4. En este paso se procedió a estructurar el archivo de Terraform con el código necesario para crear y configurar mediante el proveedor de AWS, lo siguiente:

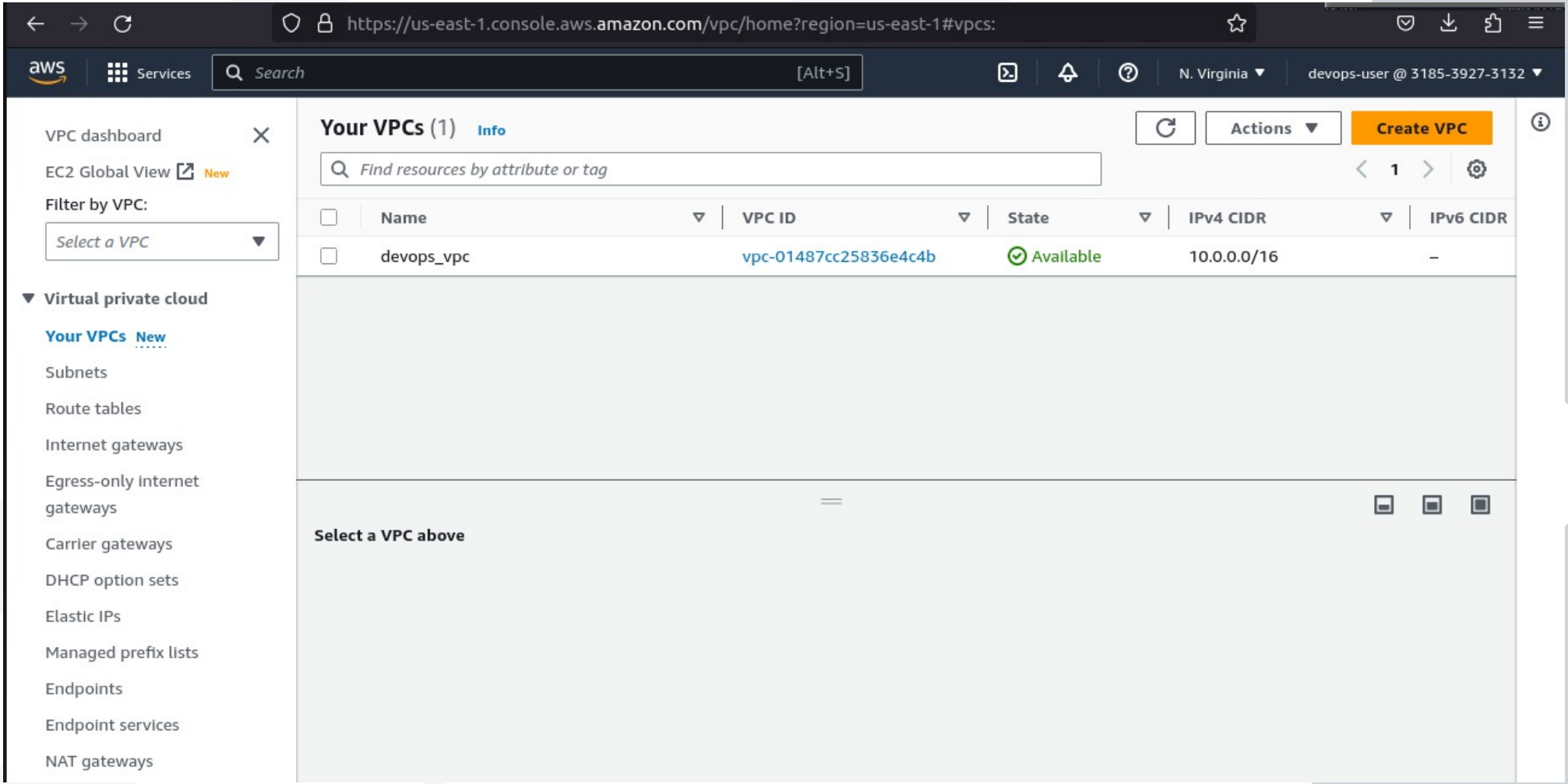
1. Creación de una Ip elástica.
2. Asociación de la Ip elástica con la instancia de Windows.
3. Creación de una VPC.
4. Creación de un Security Group.
5. Creación de una instancia.

5. Después se ejecutó el comando “terraform plan - -out instance.plan”.



6. Finalmente se procede con la ejecución del comando “terraform apply” para la creación de los recursos en AWS.




https://us-east-1.console.aws.amazon.com/vpc/home?region=us-east-1#vpcs:
aws
Services
Search
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devops-user @ 3185-3927-3132
VPC dashboard
EC2 Global View
New
Filter by VPC:
Select a VPC
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Your VPCs (1)
Info
Actions
Create VPC
Find resources by attribute or tag
1
Name
VPC ID
State
IPv4 CIDR
IPv6 CIDR
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vpc-01487cc25836e4c4b
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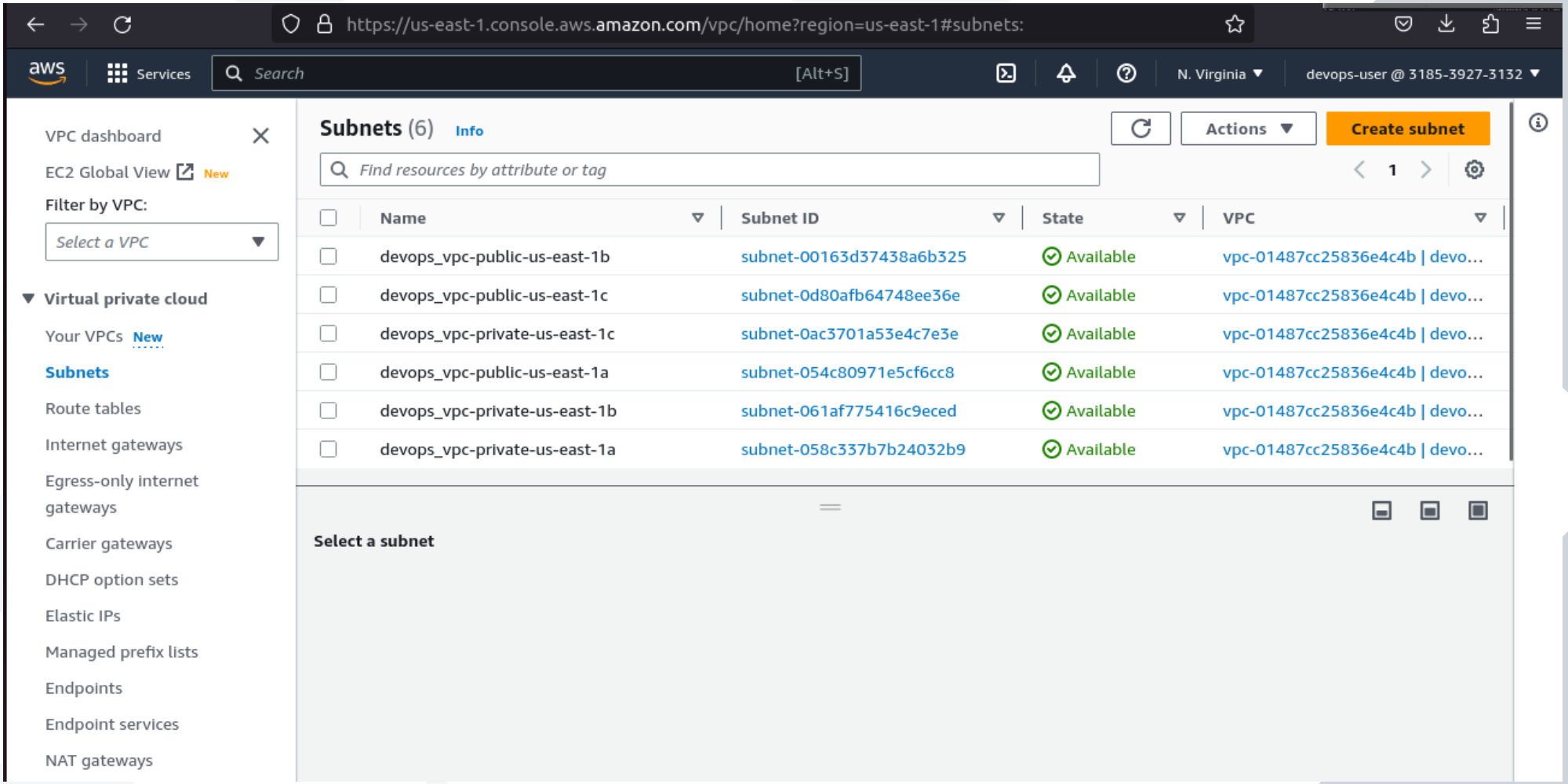
https://us-east-1.console.aws.amazon.com/vpc/home?region=us-east-1#subnets:
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VPC dashboard
EC2 Global View New
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Subnets (6) Info
Actions
Create subnet
Find resources by attribute or tag
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Name
Subnet ID
State
VPC
devops_vpc_public-us-east-1b subnet-00163d37438a6b325 Available vpc-01487cc25836e4c4b | devo...
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devops_vpc_public-us-east-1a subnet-054c80971e5cf6cc8 Available vpc-01487cc25836e4c4b | devo...
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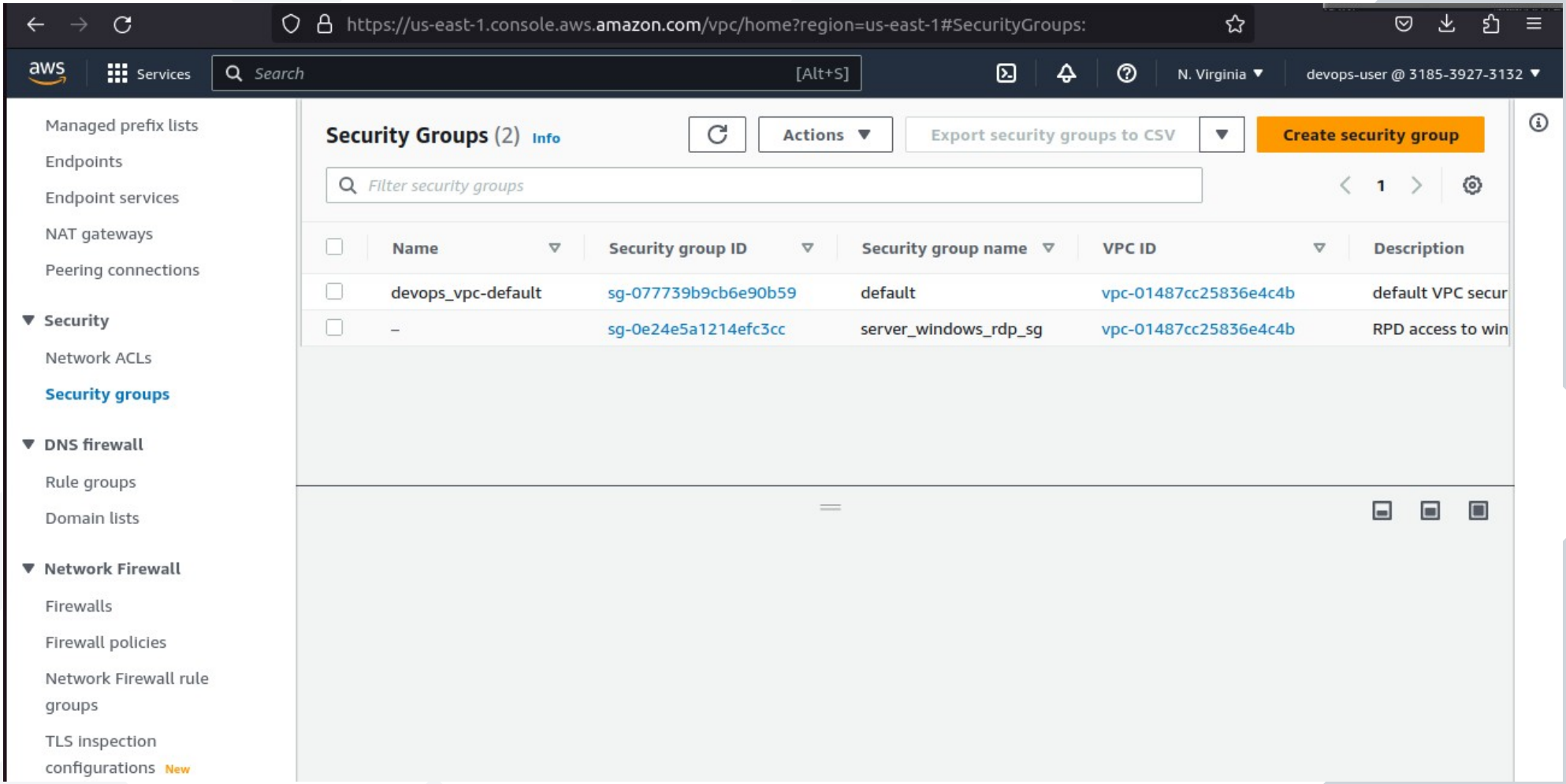
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Managed prefix lists
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Security
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DNS firewall
Rule groups
Domain lists
Network Firewall
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Security Groups (2) Info
Actions
Export security groups to CSV
Create security group
Filter security groups
1
Name
Security group ID
Security group name
VPC ID
Description
devops_vpc-default
sg-077739b9cb6e90b59
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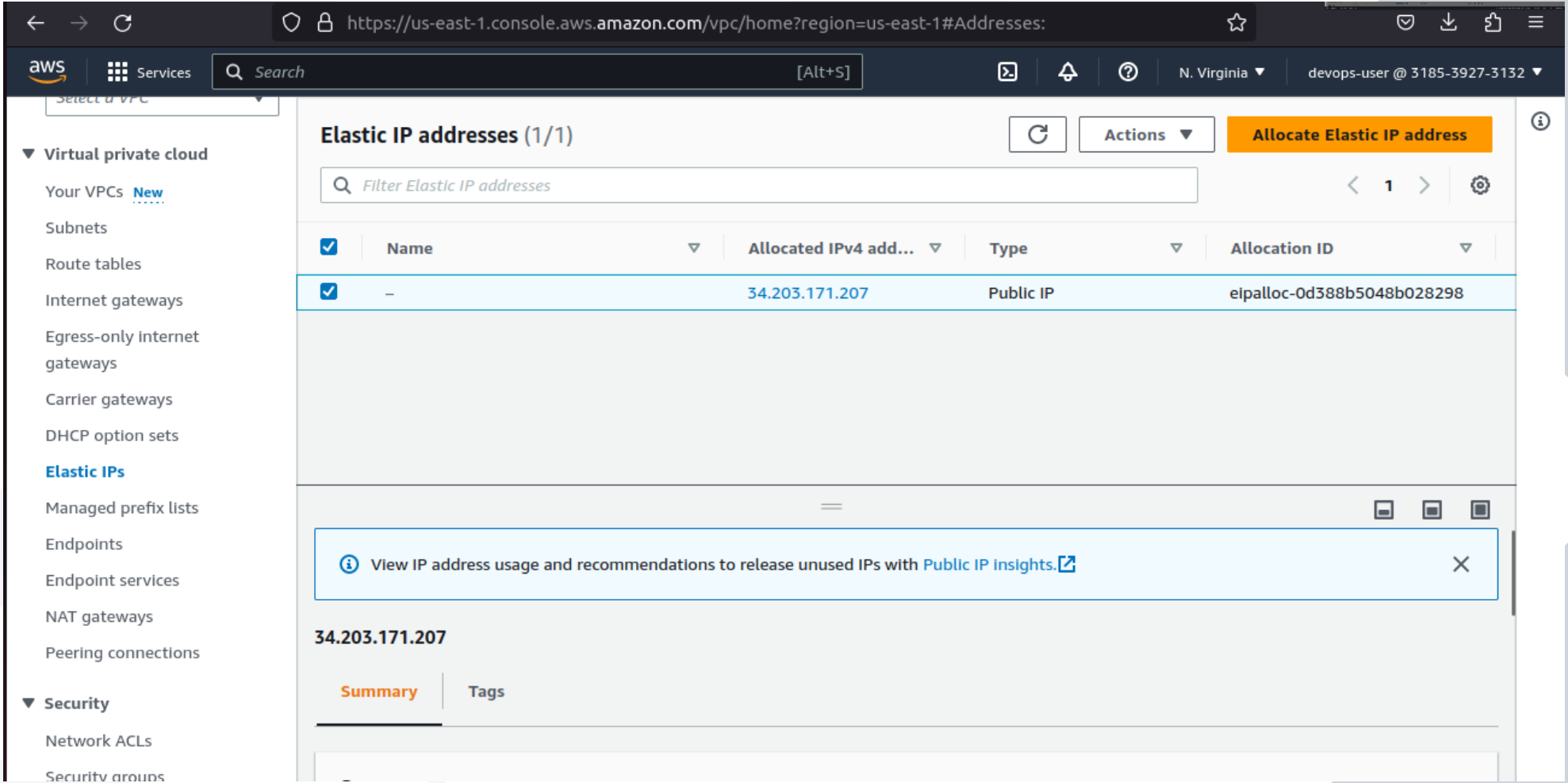
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Virtual private cloud
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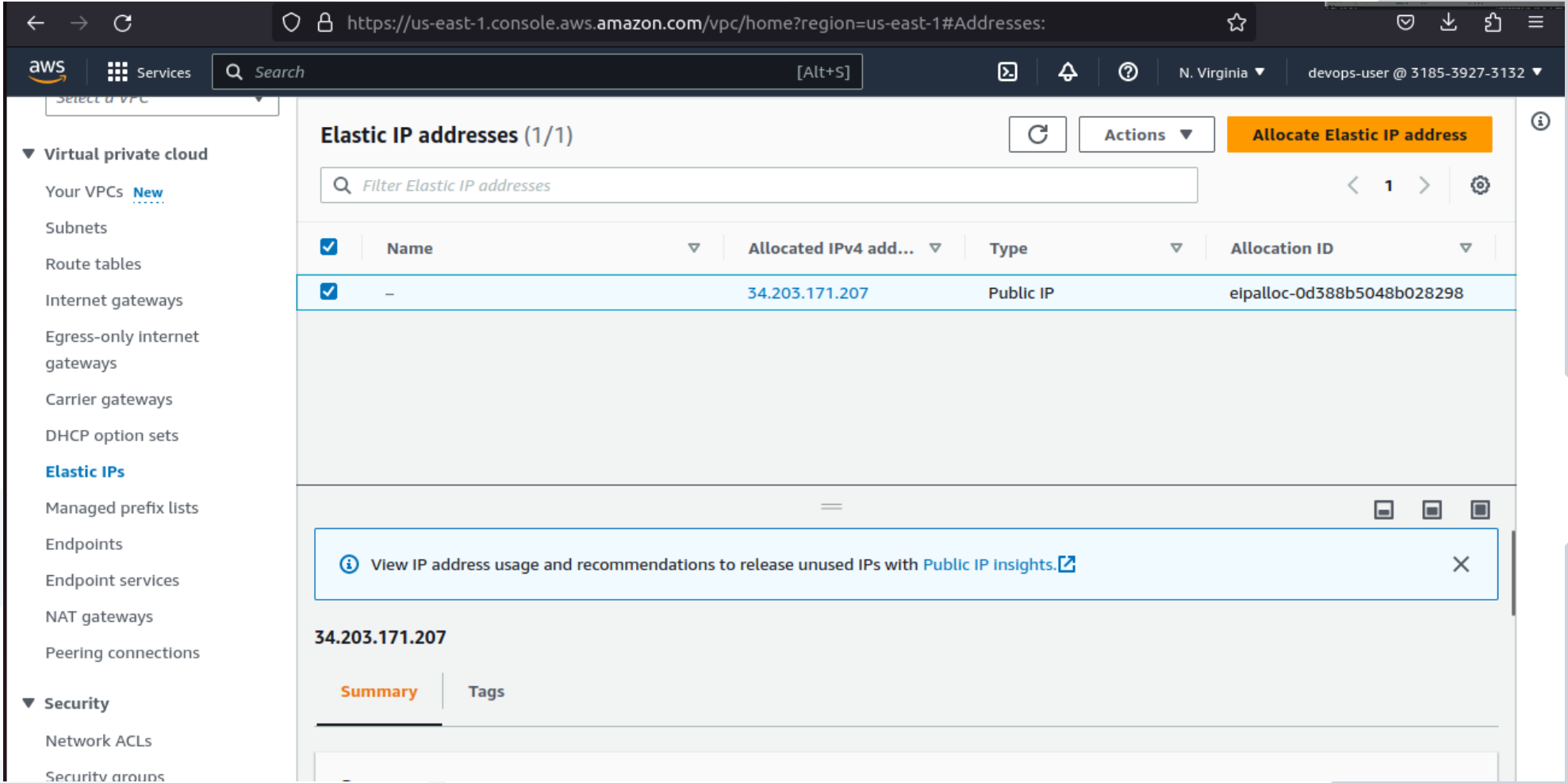
Network ACLs
Elastic IP addresses (1/1)
Actions
Allocate Elastic IP address
Filter Elastic IP addresses
Name
Allocated IPv4 add...
Type
Allocation ID
34.203.171.207
Public IP
eipalloc-0d388b5048b028298
View IP address usage and recommendations to release unused IPs with Public IP insights.
34.203.171.207
Summary
Tags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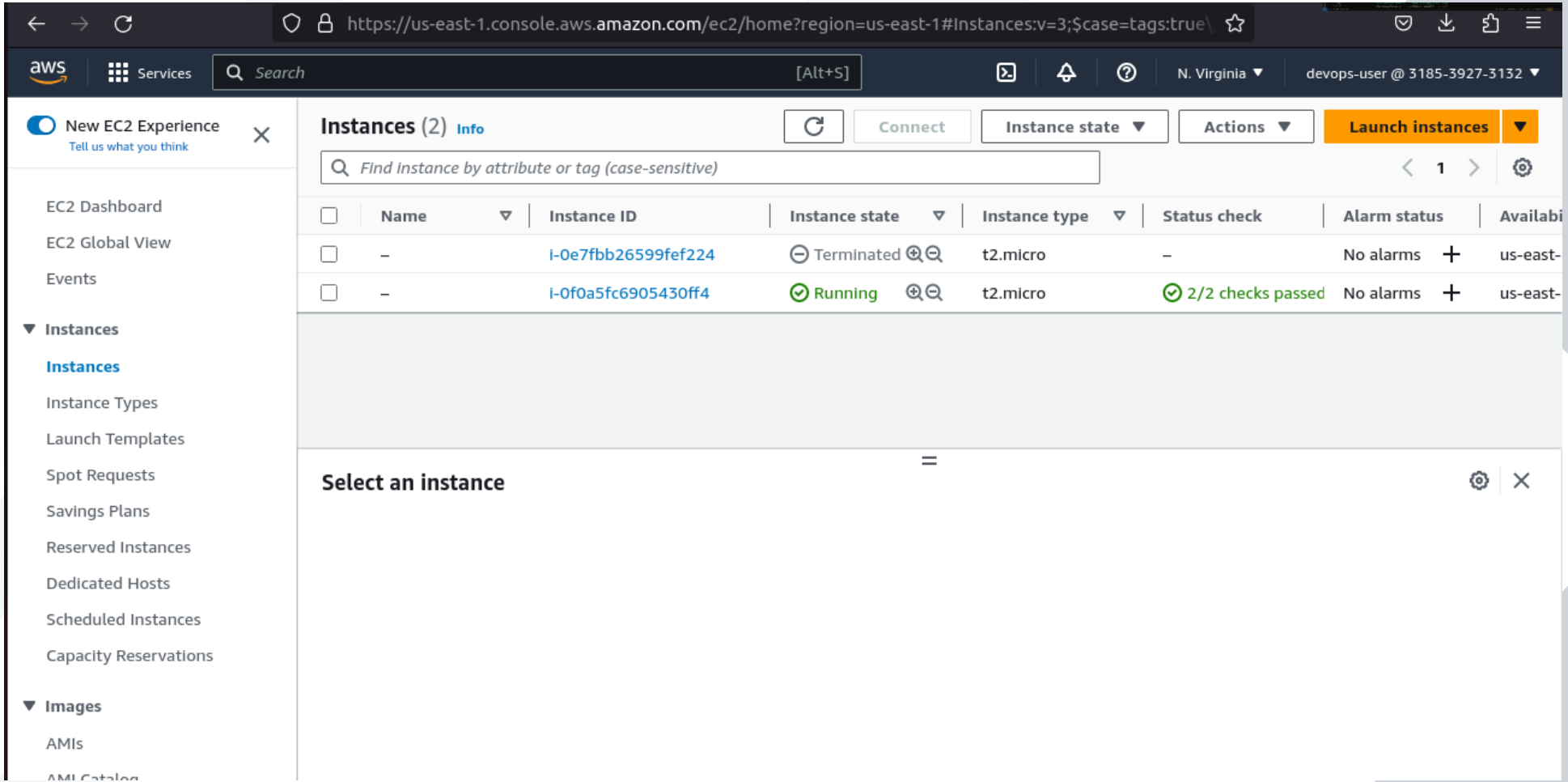
https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:v=3;$case=tags:true
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New EC2 Experience
Tell us what you think
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Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
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Instances (2) Info
Connect
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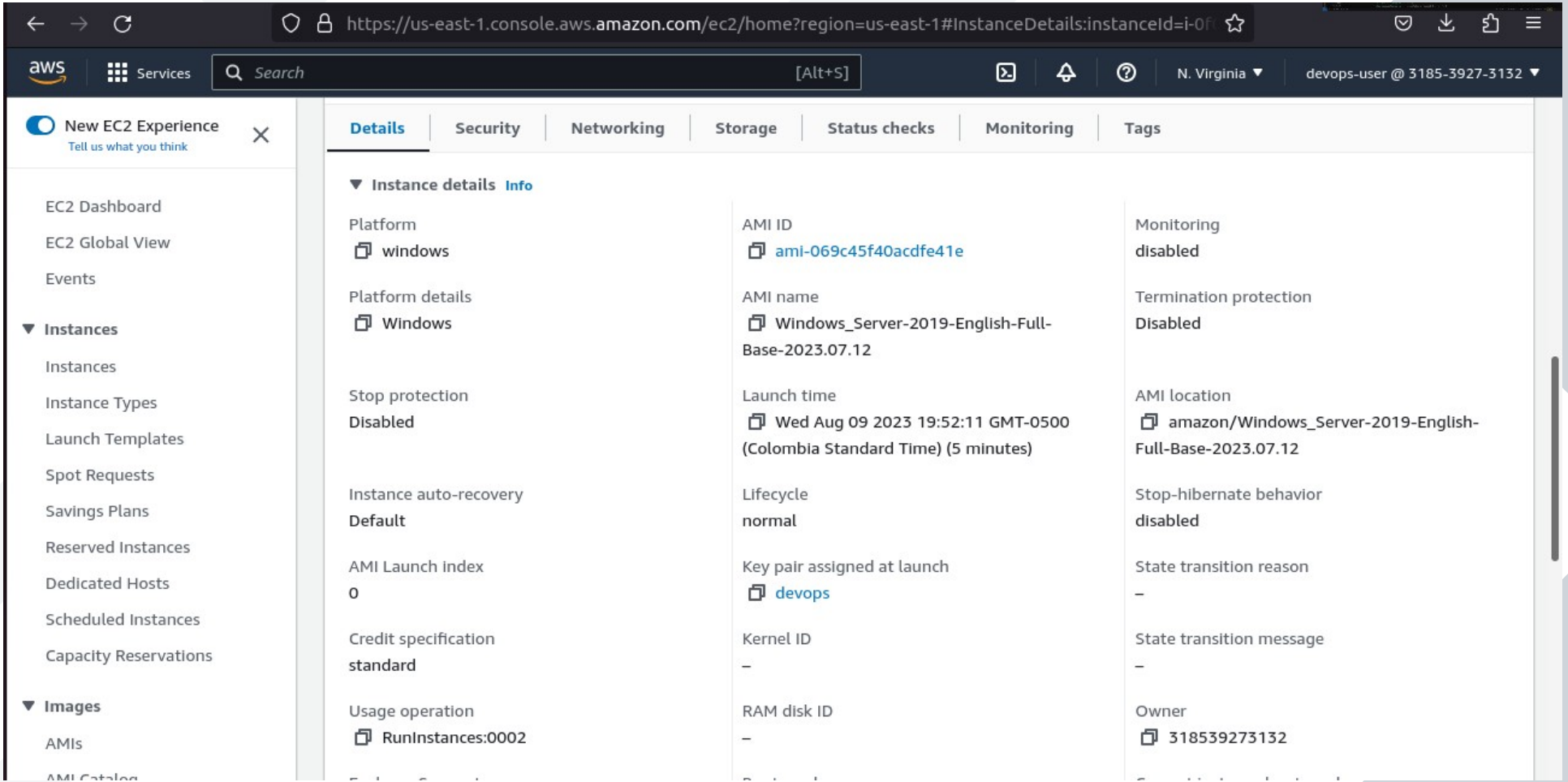
Launch instances
Find instance by attribute or tag (case-sensitive)
1
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availabi
– i-0e7fbb26599fef224 Terminated t2.micro – No alarms us-east-
– i-0f0a5fc6905430ff4 Running t2.micro 2/2 checks passed No alarms us-east-
Select an instance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Tags
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windows
Platform details
Windows
Stop protection
Disabled
Instance auto-recovery
Default
AMI Launch index
0
Credit specification
standard
Usage operation
RunInstances:0002
AMI ID
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AMI name
Windows_Server-2019-English-Full-Base-2023.07.12
Launch time
Wed Aug 09 2023 19:52:11 GMT-0500 (Colombia Standard Time) (5 minutes)
Lifecycle
normal
Key pair assigned at launch
devops
Kernel ID
–
RAM disk ID
–
Monitoring
disabled
Termination protection
Disabled
AMI location
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Stop-hibernate behavior
disabled
State transition reason
–
State transition message
–
Owner
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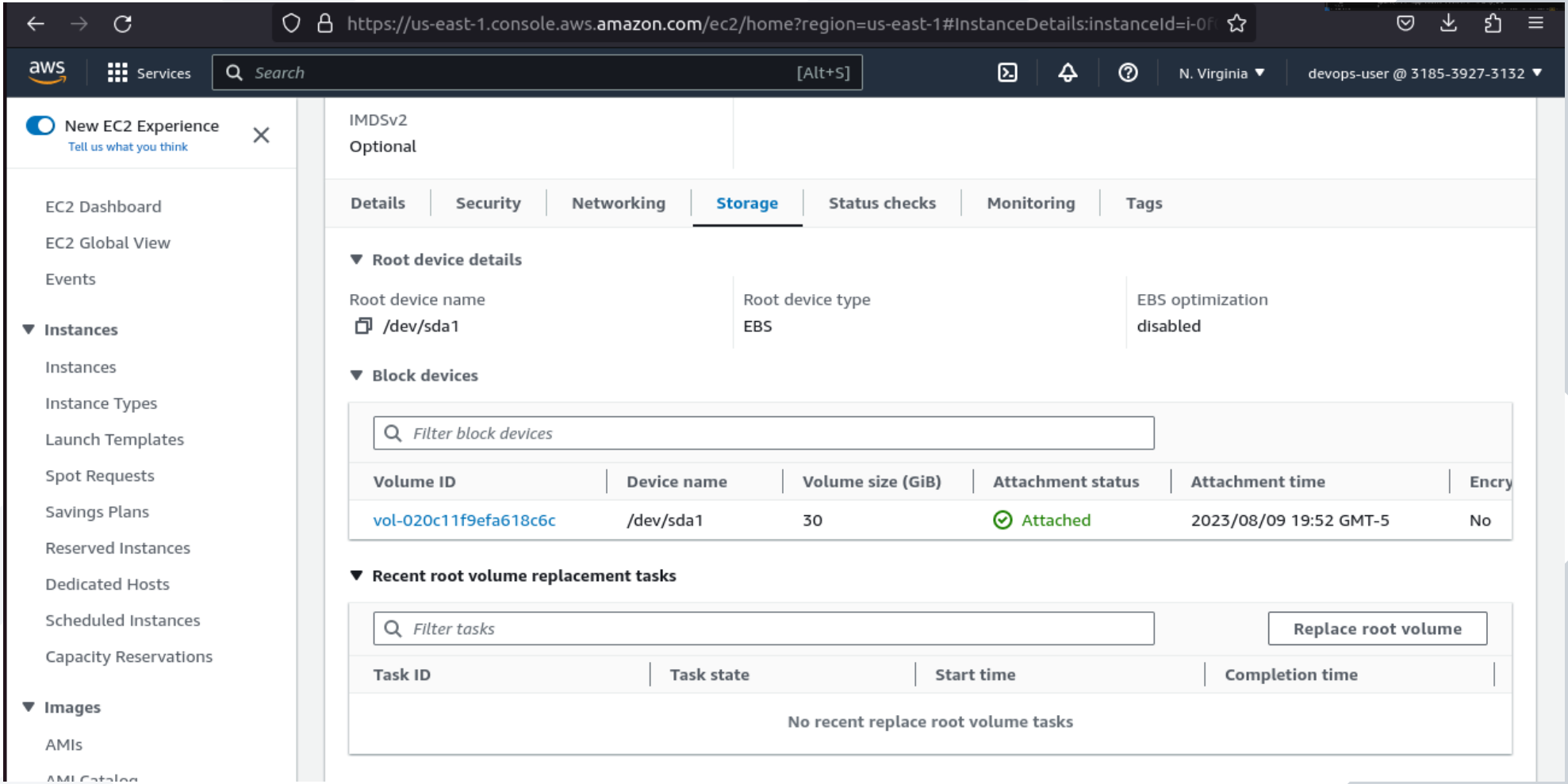
https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-0f
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Root device type
EBS
EBS optimization
disabled
Block devices
Filter block devices
Volume ID
Device name
Volume size (GiB)
Attachment status
Attachment time
Encry
vol-020c11f9efa618c6c
/dev/sda1
30
Attached
2023/08/09 19:52 GMT-5
No
Recent root volume replacement tasks
Filter tasks
Replace root volume
Task ID
Task state
Start time
Completion time
No recent replace root volume tasks

Repositorio de Github donde se encuentra el código:

https://github.com/BambooThink/BootcampDevOps2023/tree/main/Solucion_Desafio_5