Uso de AWS CLI

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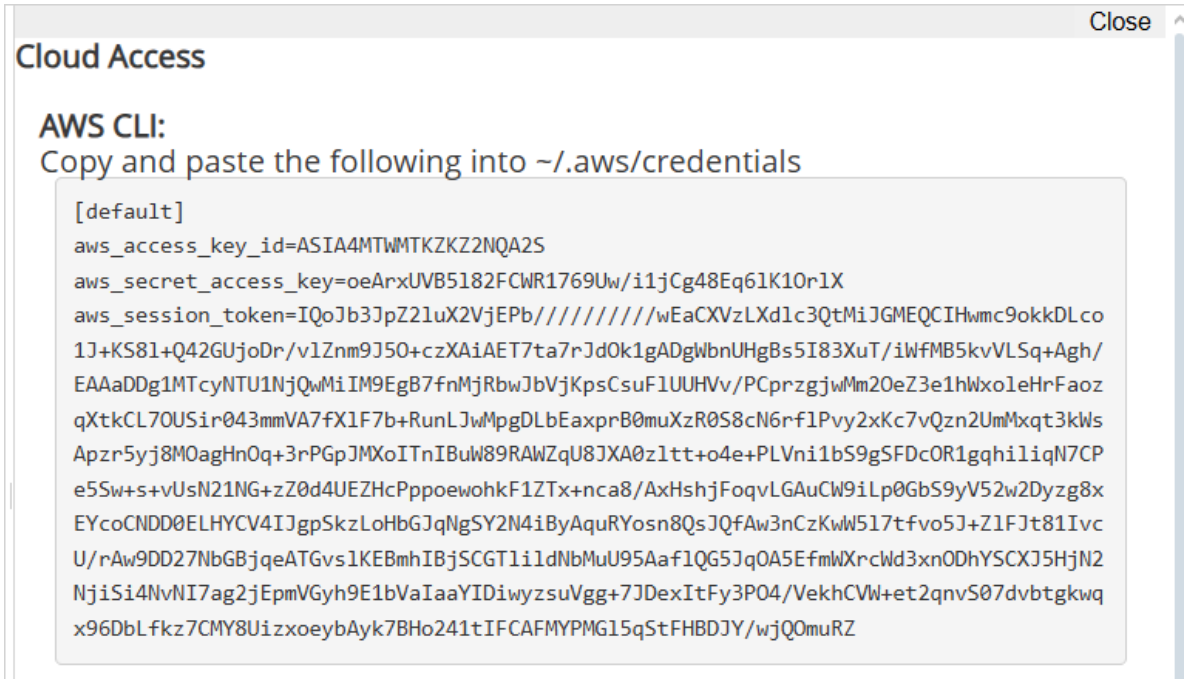
USO DE AMAZON CLI

- Primero vamos a descargar AWS CLI desde el browser, luego de tenerlo vamos a realizar los siguientes pasos.
- Vamos a escribir aws configure y se vera de la siguiente forma:

Los valores que se ven en la imagen fueron sacados de la información del laboratorio:



- Veremos que se crearon los dos archivos el de credenciales y el de configuración:

```
C:\Users\ivans>cd .aws

C:\Users\ivans\.aws>dir
 El volumen de la unidad C es Windows-SSD
 El número de serie del volumen es: 52FA-F0E0

 Directorio de C:\Users\ivans\.aws

25/09/2025  06:03 p. m.    <DIR>          .
25/09/2025  06:03 p. m.    <DIR>          ..
25/09/2025  06:03 p. m.                46 config
25/09/2025  06:03 p. m.               933 credentials
               2 archivos            979 bytes
               2 dirs  168.212.393.984 bytes libres

C:\Users\ivans\.aws>notepad config

C:\Users\ivans\.aws>notepad credentials
```

- Verificamos el contenido de los archivos.

```
[default]
aws_access_key_id = ASIA4MTWMTKZKZ2NQA2S
aws_secret_access_key = oeArxUVB5l82FCWR1769Uw/i1jCg48Eq6lK1OrlX
aws_session_token =
IQoJb3JpZ2luX2VjEPb/////////wEaCXVzLXdlc3QtMiJGMEQCIHwmc9okkDLco1J+KS8l+Q42GUjoDr/vlZnm9J5O+cz
XAiAET7ta7rJdOk1gADgWbnUHgBs5l83XuT/iWfMB5kvVLSq+Agh/EAAaDDg1MTcyNTU1NjQwMiIM9EgB7fnMjRbwJ
bVjKpsCsuFlUUHVv/PCprzgjwMm2OeZ3e1hWxoleHrFaozqXtkCL7OUSir043mmVA7fXlF7b+RunLJwMpgDLbEaxprB0m
uXzR0S8cN6rflPvy2xKc7vQzn2UmMxqt3kWsApzr5yj8MOagHnOq+
3rPGpJMXoITnIBuW89RAWZqU8JXA0zltt+o4e+PLVni1bS9gSFDcOR1gqhiliqN7CPe5Sw+s+vUsN21NG+zZ0d4UEZHcP
ppoewohkF1ZTx+nca8/AxHshjFoqvLGAuCW9iLp0GbS9yV52w2Dyzg8xEYcoCNDD0ELHYCV4IJgpSkzLoHbGJqNgSY2N
4iByAquRYosn8QsJQfAw3nCzKwW5l7tfvo5J+ZlFJt81IvcU/rAw9DD27NbGBjqeATGvslKEBmhIBjSCGTlildNbMuU95Aaf
lQG5JqOA5EfmWXrcWd3xnODhYSCXJ5HjN2NjiSi4NvNI7ag2jEpmVGyh9E1bVaIaaYIDiwyzsuVgg+
7JDexItFy3PO4/VekhCVW+et2qnvS07dvbtgkwqx96DbLfkz7CMY8UizxoeybAyk7BHo241tIFCAFMYPMGl5qStFHBDJY/
wjQOmuRZ
```

- Creamos una llave de seguridad llamada MyKeyPair y la guardamos en

  MyKeyPair.pem, luego le damos permisos de solo lectura a la llave.

```
C:\Users\ivans\.aws>aws ec2 create-key-pair --key-name MyKeyPair --query "KeyMaterial" --output text > MyKeyPair.pem

C:\Users\ivans\.aws>notepad MyKeyPair.pem

C:\Users\ivans\.aws>chmod 400 MyKeyPair.pem
```

- Hacemos la verificación de los permisos.

```
C:\Users\ivans\.aws>ls -la
total 25
drwxr-xr-x 1 ivans 197609    0 Sep 25 18:06 .
drwxr-xr-x 1 ivans 197609    0 Sep 25 19:31 ..
-r--r--r-- 1 ivans 197609 1702 Sep 25 18:06 MyKeyPair.pem
-rw-r--r-- 1 ivans 197609   46 Sep 25 18:04 config
-rw-r--r-- 1 ivans 197609  933 Sep 25 18:03 credentials
```

- Verificamos la información que esta dentro de la llave.

```
C:\Users\ivans\.aws>aws ec2 describe-key-pairs --key-name MyKeyPair
{
    "KeyPairs": [
        {
            "KeyPairId": "key-01637af0f3bffd922",
            "KeyType": "rsa",
            "Tags": [],
            "CreateTime": "2025-09-25T23:06:51.279000+00:00",
            "KeyName": "MyKeyPair",
            "KeyFingerprint": "4d:c1:8c:42:12:43:05:ed:c1:2f:e5:d1:ab:20:f2:17:ec:4c:99:70"
        }
    ]
}
```

- Con el primer comando lo que hacemos es listar el VPC que se encuentra por default en la cuenta, ya teniéndolo identificado el VPC creamos un nuevo grupo de seguridad.

```
C:\Users\ivans\.aws>aws ec2 describe-vpcs --filters Name=isDefault,Values=true --query "Vpcs[0].VpcId" --output text
vpc-0f5789b52fa5d380f


C:\Users\ivans\.aws>aws ec2 create-security-group --group-name my-sg-cli --description "My security group" --vpc-id vpc-0f5789b52fa5d380f
{
    "GroupId": "sg-0dc70906ea17fb0b9",
    "SecurityGroupArn": "arn:aws:ec2:us-east-1:851725556402:security-group/sg-0dc70906ea17fb0b9"
}
```

- Verificamos la información de nuestro grupo de seguridad.

```
C:\Users\ivans\.aws>aws ec2 describe-security-groups --group-ids sg-0dc70906ea17fb0b9
{
    "SecurityGroups": [
        {
            "GroupId": "sg-0dc70906ea17fb0b9",
            "IpPermissionsEgress": [
                {
                    "IpProtocol": "-1",
                    "UserIdGroupPairs": [],
                    "IpRanges": [
                        {
                            "CidrIp": "0.0.0.0/0"
                        }
                    ],
                    "Ipv6Ranges": [],
                    "PrefixListIds": []
                }
            ],
            "VpcId": "vpc-0f5789b52fa5d380f",
            "SecurityGroupArn": "arn:aws:ec2:us-east-1:851725556402:security-group/sg-0dc70906ea17fb0b9",
            "OwnerId": "851725556402",
            "GroupName": "my-sg-cli",
            "Description": "My security group",
            "IpPermissions": []
        }
    ]
}
```

- Con el primer comando verificamos nuestra Ip pública y con el segundo agregamos una regla de entrada a nuestro grupo de seguridad, al protocolo tcp con el puerto 3389.

```
C:\Users\ivans\.aws>curl https://checkip.amazonaws.com
181.32.31.197

C:\Users\ivans\.aws>aws ec2 authorize-security-group-ingress --group-id sg-0dc70906ea17fb0b9 --protocol tcp --port 3389 --cidr 0.0.0.0/0
{
    "Return": true,
    "SecurityGroupRules": [
        {
            "SecurityGroupRuleId": "sgr-090e28d10320468a1",
            "GroupId": "sg-0dc70906ea17fb0b9",
            "GroupOwnerId": "851725556402",
            "IsEgress": false,
            "IpProtocol": "tcp",
            "FromPort": 3389,
            "ToPort": 3389,
            "CidrIpv4": "0.0.0.0/0",
            "SecurityGroupRuleArn": "arn:aws:ec2:us-east-1:851725556402:security-group-rule/sgr-090e28d10320468a1"
        }
    ]
}
```

- Agregamos una segunda regla de entrada al puerto 22.

```
C:\Users\ivans\.aws>aws ec2 authorize-security-group-ingress --group-id sg-0dc70906ea17fb0b9 --protocol tcp --port 22 --cidr 0.0.0.0/0
{
    "Return": true,
    "SecurityGroupRules": [
        {
            "SecurityGroupRuleId": "sgr-0d279d7199340626f",
            "GroupId": "sg-0dc70906ea17fb0b9",
            "GroupOwnerId": "851725556402",
            "IsEgress": false,
            "IpProtocol": "tcp",
            "FromPort": 22,
            "ToPort": 22,
            "CidrIpv4": "0.0.0.0/0",
            "SecurityGroupRuleArn": "arn:aws:ec2:us-east-1:851725556402:security-group-rule/sgr-0d279d7199340626f"
        }
    ]
}
```

- Con el siguiente comando lo que hacemos es listar las subnets disponibles para lanzar nuestra instancia.

```
C:\Users\ivans\.aws>aws ec2 describe-subnets --filters Name=vpc-id,Values=vpc-0f5789b52fa5d380f --query "Subnets[].{ID:SubnetId,AZ:AvailabilityZone}" --outp
ut table
-------------------------------------------
|              DescribeSubnets            |
+-------------+---------------------------+
|     AZ      |            ID             |
+-------------+---------------------------+
|  us-east-1a |  subnet-0f6d748d7a7c9ef3a  |
|  us-east-1c |  subnet-03a8b270b20105187  |
|  us-east-1d |  subnet-083e61806576a4a25  |
|  us-east-1f |  subnet-0c0efdc9e47aed6cc  |
|  us-east-1b |  subnet-071949b350b202656  |
|  us-east-1e |  subnet-0b441677ae9fc76ab  |
+-------------+---------------------------+
```

- El siguiente comando nos perfimete escoger de manera automática el último AMI de Amazon Linux

```
C:\Users\ivans\.aws>aws ssm get-parameters --names /aws/service/ami-amazon-linux-latest/al2023-ami-kernel-6.1-x86_64 --query "Parameters[0].Value" --output
text
ami-08982f1c5bf93d976
```

- El siguiente comando nos permite lanzar la instancia con los parámetros especificados.

```
C:\Users\ivans\.aws>aws ec2 run-instances --image-id ami-08982f1c5bf93d976 --count 1 --instance-type t2.micro --key-name MyKeyPair --security-group-ids sg-0
dc70906ea17fb0b9 --subnet-id subnet-0f6d748d7a7c9ef3a --tag-specifications "ResourceType=instance,Tags=[{Key=Name,Value=cli-demo}]"
{
```

- Veremos que se despliega toda la información.


```
{
    "ReservationId": "r-0db71ce41ee18e1b7",
    "OwnerId": "851725556402",
    "Groups": [],
    "Instances": [
        {
            "Architecture": "x86_64",
            "BlockDeviceMappings": [],
            "ClientToken": "a23829f1-d94b-43a8-9dd3-14d51a1f2f2a",
            "EbsOptimized": false,
            "EnaSupport": true,
            "Hypervisor": "xen",
            "NetworkInterfaces": [
                {
                    "Attachment": {
                        "AttachTime": "2025-09-26T03:14:13+00:00",
                        "AttachmentId": "eni-attach-0a224ca91aac7e178",
                        "DeleteOnTermination": true,
                        "DeviceIndex": 0,
                        "Status": "attaching",
                        "NetworkCardIndex": 0
                    },
                    "Description": "",
                    "Groups": [
                        {
                            "GroupId": "sg-0dc70906ea17fb0b9",
                            "GroupName": "my-sg-cli"
                        }
                    ],
                    "Ipv6Addresses": [],
                    "MacAddress": "0e:06:d4:d6:8c:15",
                    "NetworkInterfaceId": "eni-02bc2ed3840acc983",
                    "OwnerId": "851725556402",
                    "PrivateDnsName": "ip-172-31-41-237.ec2.internal",
                    "PrivateIpAddress": "172.31.41.237",
                    "PrivateIpAddresses": [
                        {
                            "Primary": true,
```

```
            {
                "Primary": true,
                "PrivateDnsName": "ip-172-31-41-237.ec2.internal",
                "PrivateIpAddress": "172.31.41.237"
            }
        ],
        "SourceDestCheck": true,
        "Status": "in-use",
        "SubnetId": "subnet-0f6d748d7a7c9ef3a",
        "VpcId": "vpc-0f5789b52fa5d380f",
        "InterfaceType": "interface",
        "Operator": {
            "Managed": false
        }
    }
],
"RootDeviceName": "/dev/xvda",
"RootDeviceType": "ebs",
"SecurityGroups": [
    {
        "GroupId": "sg-0dc70906ea17fb0b9",
        "GroupName": "my-sg-cli"
    }
],
"SourceDestCheck": true,
"StateReason": {
    "Code": "pending",
    "Message": "pending"
},
"Tags": [
    {
        "Key": "Name",
        "Value": "cli-demo"
    }
],
"VirtualizationType": "hvm",
"CpuOptions": {
    "CoreCount": 1,
    "ThreadsPerCore": 1
},
"CapacityReservationSpecification": {
```

```
},
"CapacityReservationSpecification": {
    "CapacityReservationPreference": "open"
},
"MetadataOptions": {
    "State": "pending",
    "HttpTokens": "required",
    "HttpPutResponseHopLimit": 2,
    "HttpEndpoint": "enabled",
    "HttpProtocolIpv6": "disabled",
    "InstanceMetadataTags": "disabled"
},
"EnclaveOptions": {
    "Enabled": false
},
"BootMode": "uefi-preferred",
"PrivateDnsNameOptions": {
    "HostnameType": "ip-name",
    "EnableResourceNameDnsARecord": false,
    "EnableResourceNameDnsAAAARecord": false
},
"MaintenanceOptions": {
    "AutoRecovery": "default",
    "RebootMigration": "default"
},
"CurrentInstanceBootMode": "legacy-bios",
"Operator": {
    "Managed": false
},
"InstanceId": "i-0ccfc767f4b2e682e",
"ImageId": "ami-08982f1c5bf93d976",
"State": {
    "Code": 0,
    "Name": "pending"
},
"PrivateDnsName": "ip-172-31-41-237.ec2.internal",
"PublicDnsName": "",
"StateTransitionReason": "",
"KeyName": "MyKeyPair",
"AmiLaunchIndex": 0,
"ProductCodes": [],
```

```
                "Name": "pending"
            },
            "PrivateDnsName": "ip-172-31-41-237.ec2.internal",
            "PublicDnsName": "",
            "StateTransitionReason": "",
            "KeyName": "MyKeyPair",
            "AmiLaunchIndex": 0,
            "ProductCodes": [],
            "InstanceType": "t2.micro",
            "LaunchTime": "2025-09-26T03:14:13+00:00",
            "Placement": {
                "AvailabilityZoneId": "use1-az6",
                "GroupName": "",
                "Tenancy": "default",
                "AvailabilityZone": "us-east-1a"
            },
            "Monitoring": {
                "State": "disabled"
            },
            "SubnetId": "subnet-0f6d748d7a7c9ef3a",
            "VpcId": "vpc-0f5789b52fa5d380f",
            "PrivateIpAddress": "172.31.41.237"
        }
    ]
}
```


- El siguiente comando permite listar el dominio dado Dns público de aws


```
C:\Users\ivans\.aws>aws ec2 describe-instances --instance-ids i-0ccfc767f4b2e682e --query "Reservations[0].Instances[0].PublicDnsName" --output text
ec2-98-83-206-180.compute-1.amazonaws.com
```


- Con el siguiente comando nos conectamos a la instancia


```
C:\Users\ivans\.aws>ssh -i "C:\Users\ivans\.aws\MyKeyPair.pem" ec2-user@ec2-98-83-206-180.compute-1.amazonaws.com
   ,     #_
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
```


- Luego de comprobar la conexión nos salimos, y allí listamos por el identificador las instancias que cumplen la condición t2.micro


```
C:\Users\ivans\.aws>aws ec2 describe-instances --filters "Name=instance-type,Values=t2.micro" --query "Reservations[].Instances[].InstanceId"
[
    "i-0ccfc767f4b2e682e"
]
```

- Con los dos siguientes comandos terminamos la ejecución de la instancia y eliminamos el grupo de seguridad.

```
C:\Users\ivans\.aws>aws ec2 terminate-instances --instance-ids i-0ccfc767f4b2e682e
{
    "TerminatingInstances": [
        {
            "InstanceId": "i-0ccfc767f4b2e682e",
            "CurrentState": {
                "Code": 32,
                "Name": "shutting-down"
            },
            "PreviousState": {
                "Code": 16,
                "Name": "running"
            }
        }
    ]
}


C:\Users\ivans\.aws>aws ec2 delete-security-group --group-id sg-0dc70906ea17fb0b9
{
    "Return": true,
    "GroupId": "sg-0dc70906ea17fb0b9"
}
```

- Con los dos siguientes comandos eliminamos el par de llaves y el .pem de la maquina local.

```
C:\Users\ivans\.aws>aws ec2 delete-key-pair --key-name MyKeyPair
{
    "Return": true,
    "KeyPairId": "key-01637af0f3bffd922"
}


C:\Users\ivans\.aws>del /f "C:\Users\ivans\.aws\MyKeyPair.pem"
```