Infrastructure as Code: AWS-CLI Primer Workshop

Requisitos de finalización

AWS-CLI Primer Workshop

In this workshop, you will learn how to use AWS-CLI to create an EC2 instance.

Prerequisites

Install the AWS-CLI application.

Configure the AWS-CLI application:

```
aws configure
```

Example configuration:

```
AWS Access Key ID [None]: AKIAIOSFODNN7EXAMPLE
AWS Secret Access Key [None]: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
Default region name [None]: us-west-2
Default output format [None]: json
```

Step 1: Create a Key Pair for EC2

```
aws ec2 create-key-pair --key-name MyKeyPair --query 'KeyMaterial' --output text > MyKeyPair.pem
```

```
ls
```

Output:

```
MyKeyPair.pem
```

Make the private key readable only by you:

```
chmod 400 MyKeyPair.pem
```

```
ls -la
```

Output:

```
-r--------  1 user  staff  1675 Oct  9 20:39 MyKeyPair.pem
```

Check the fingerprint:

```
aws ec2 describe-key-pairs --key-name MyKeyPair
```

Step 2: Create a Security Group

First, check for VPCs configured in your account.

```
aws ec2 create-security-group --group-name my-sg-cli --description "My security group" --vpc-id vpc-xxxxxxxx
```

Example output:

```
{
    "GroupId": "sg-01f4c77b81e9dc434"
}
```

List security groups:

```
aws ec2 describe-security-groups --group-ids sg-01f4c77b81e9dc434
```

Add Ingress Rules

Check your public IP address (optional for restricted access):

```
curl https://checkip.amazonaws.com
```

Example output:

```
186.96.109.58
```

Allow RDP (port 3389):

```
aws ec2 authorize-security-group-ingress --group-id sg-01f4c77b81e9dc434 --
protocol tcp --port 3389 --cidr 0.0.0.0/0
```

Allow SSH (port 22):

```
aws ec2 authorize-security-group-ingress --group-id sg-01f4c77b81e9dc434 --
protocol tcp --port 22 --cidr 0.0.0.0/0
```

Step 3: Create the Instance

Before creating the instance, ensure you have a subnet configured.

Run the following command to launch a `t2.micro` instance:

```
aws ec2 run-instances --image-id ami-032930428bf1abbff --count 1 --instance-type
t2.micro --key-name MyKeyPair --security-group-ids sg-01f4c77b81e9dc434 --subnet-
id subnet-1175cf1d
```

Step 4: Connect to the Instance

```
ssh -i "MyKeyPair.pem" ec2-user@ec2-34-204-197-22.compute-1.amazonaws.com
```

Step 5: List Your Instances

```
aws ec2 describe-instances --filters "Name=instance-type,Values=t2.micro" --query
"Reservations[].Instances[].InstanceId"
```

Step 6: Clean Up

Delete the key pair:

```
aws ec2 delete-key-pair --key-name MyKeyPair
```

Delete the security group:

```
aws ec2 delete-security-group --group-id sg-903004f8
```

Terminate the instance:

```
aws ec2 terminate-instances --instance-ids i-07d0ddb36ea3e65a4
```

Conclusion

Congratulations! You just learned how to automatically deploy an EC2 instance on AWS.

References

- AWS CLI User Guide